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HOME VIDEO RECORDING

HEARING

OF THE

COMMITTEE ON THE JUDICIARY
UNITED STATES SENATE

NINETY-NINTH CONGRESS

SECOND SESSION

ON

PROVIDING INFORMATION ON THE ISSUE OF HOME VIDEO RECORDING

SEPTEMBER 23, 1986

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HOME VIDEO RECORDING

TUESDAY, SEPTEMBER 23, 1986

U.S. SENATE,
COMMITTEE ON THE JUDICIARY,
Washington, DC.

The committee met, pursuant to notice, at 10:32 a.m., in room SD-226, Dirksen Senate Office Building, Hon. Strom Thurmond (chairman of the committee) presiding.

Also present: Senators Denton and Simon.

Staff present: Cindi Blackburn, counsel.

OPENING STATEMENT OF CHAIRMAN STROM THURMOND

The CHAIRMAN. The committee will come to order.

I am pleased to welcome everyone to the Senate Judicary Committee hearing on home video recording.

This issue has been examined by the Judicary Committee in previous Congresses. However, no legislation has been passed by Congress.

Currently, there is no legislation pending in the Senate on this subject. The purpose of this hearing today is to provide information on the issue of home video recording.

In examining this issue, it is necessary to ask three questions. First, is the practice of copying prerecorded copyrighted video cassettes a problem?

Second, if it is a problem, is the problem of such magnitude as to require Congress to provide a legislative solution?

Third, and last, what alternative legislative approaches should be pursued in drafting such legislation?

I expect that the testimony presented today will provide answers to these questions. I look forward to hearing the testimony, and I thank each one of you for taking the time to present your views.

I believe our first panel to day is Mr. Jack Valenti, president and chief executive officer of the Motion Picture Association of America, and Mr. Robert Gehrke, president, Training and Educational Services, Frederick, MD.

Would you gentlemen come around. Mr. Valenti, we are glad to have you and you may proceed. Now we can put your entire statement in the record, if you could brief it, as we have a good many witnesses here and our time is limited.

STATEMENTS OF A PANEL CONSISTING OF JACK VALENTI, PRESIDENT/CHIEF EXECUTIVE OFFICER, MOTION PICTURE ASSOCIATION OF AMERICA, INC., WASHINGTON, DC; AND ROBERT GEHRKE, PRESIDENT, TRAINING AND EDUCATIONAL SERVICES, INC., FREDERICK, MD

Mr. VALENTI. Mr. Chairman, I will not read from a statement. I will try to do this extemporaneously, within 5 minutes, if that is suitable to you——

The CHAIRMAN. Oh, that is fine.

Mr. VALENTI [continuing]. Since I come from the world of movies, I thought I would try to use visuals, rather than the written word.

I have a little board here which I hope will be suitable to present our cases. The three questions you ask are worthy questions. One, is it a problem? Back-to-back copying is what we call it. My answer is yes, it is a problem. Back-to-back copying is a problem.

The next question you asked, is it of sufficient magnitude to cause this Congress to respond to it? The answer is yes, because it will get worse as the number of VCR's invade the homes and inhabit homes of Americans in the future.

No. 3, you also asked a most suitable question, is what is the alternative, then, to be offered? I am going to bring to you today, and also, the panel of witnesses who will follow me, will present to you and this Congress a simple cure to this problem.

What I am presenting to you today is one segment of the entire home video market. I am focusing on only one portion, and that is what we call back-to-back copying. People who go to a video retail store, buy or rent a full-length motion picture, and, I might add, other things—exercise, workout cassettes, whatever. But I am focusing on the full-length movie. They bring it home, and by hooking two VCR's together, you can make back-to-back copying.

First, we think that that is illegal under the Copyright Act of 1976, but that is a creature of the Congress, and if you chose to change it you could.

But moreover, we think it is harmful, and that is something that no Congress can change. What is happening in the marketplace is a problem.

Let me give you some numbers, Mr. Chairman, that come from A.C. Neilsen, which is the prestigious survey company in the television world, and from Paul Kagan & Associates, who has become kind of a statistical reservoir of information in our business.

Then I will give you some Motion Picture Association data. This is one of them; 8 out of 10 movies do not recoup their investment from theatrical exhibition.

It means they must go to other marketplaces in order to retrieve the money that has been invested in them; 6 out of 10 movies never recoup their cost, even having gone into all marketplaces. A.C. Neilsen tells us that today there are 44 million VCR households in this country. In 1990 it will go to 56 million, up 66 percent in just 4 years. But as Alice in Wonderland would say, a curioser and curioser fact begins to appear. Multiple VCR households.

Today, Neilsen estimates there are 4 million homes in America that have more than 1 VCR. By 1990, Paul Kagan says these 2, or multiple, VCR homes will go to 17 million, and by 1995, to 35 mil-

lion. I am not going to worry about 1995 but I am going to worry about 1990.

The ability to copy a full-length movie—is that prevalent? Neilsen's surveys show that 20 percent of all VCR owners today say the principal reason, or one of the dominant reasons, that persuaded them to buy a VCR was the ability to copy full-length motion pictures.

How big is the problem? Again, A.C. Neilsen says that in 1986 there were in American homes, 70 million copies of full-length movies and other software done by the back-to-back copying.

When you keep in mind that there were only about 95 million video cassettes of movies that had been sold to dealers, 1980 to 1985, then you understand what that number means. Seventy million copies. That is not my number, Mr. Chairman. It comes from Neilsen.

In 1984, 109 million blank video cassettes were sold. In 1986, 275 to 300 million will be sold. When you understand there are only 34 million VCR households, that is a lot of blank cassettes, if all you are doing is time-shifting, or taking home movies of Aunt Sadie and Little Bubba. You are doing something more with those blanks.

In 1985 there were 700 million video cassette rental transactions. That is the heart and core, the bone, sinew and blood of the video retail marketplace. What we are saying is, that absent any kind of tether, or harness, on back-to-back copying, one cannot know how much harm that will do to the marketplace.

We do know that when you make a back-to-back copy, whether you are doing it for a neighbor, or you are doing it for a friend, or however you are doing it—it means there may be one less rental of that movie somewhere down the line.

It may be one less sale of that movie somewhere down the line. I am making no certified predictions. I am only using what I call common sense, Senator, backed up by the A.C. Neilsen data.

You might say, well, all right, you have told me that there is a problem. What is the solution? The solution, Senator, is as follows. I will do one more, 30 seconds——

The CHAIRMAN. All right. Go ahead.

Mr. VALENTI [continuing]. And then I will be gone, sir. The solution is—and people who follow me will explain this to you fully—is the insertion of a small little device of changing the circuitry of a VCR, inexpensively—for less than, say, 10 cents—which would then connect to and be coincident with electronically arming a prerecorded cassette.

So that when you have, you go to the store, say you get a "Sound of Music" cassette and you bring it home. It is armed electronically. When you try to copy it, the little device in your VCR new set will be triggered by this electronic signal in the video cassette and copying will be foiled.

It does not disturb any other copying that is going on in the home.

We are focusing on only one narrow segment of home video. So everything that you are doing in your home you continue. The only thing you would not be able to do, if the Congress decreed that every VCR imported into this country would have this foiling

device on it—just as we say that cars coming into this country must have certain emission controls—if that happened, the home video customer would find his whole universe undisturbed, except for one thing. He could not rent a full-length movie and copy it at home.

That is the simple cure to this problem which we think will avalanche and radically affect the marketplace in the years to come. Thank you, sir.

[The statement follows:]

"THE DARKER INFECTION OF BACK-TO-BACK COPYING --
AND HOW TO CURE IT"

TESTIMONY OF
JACK VALENTI
PRESIDENT AND CHIEF EXECUTIVE OFFICER
MOTION PICTURE ASSOCIATION OF AMERICA, INC.

ON UNAUTHORIZED BACK-TO-BACK COPYING OF COPYRIGHTED
PRERECORDED VIDEOCASSETTES AND VIDEODISCS

Mr. Chairman, and Members of the Committee:

My name is Jack Valenti.

I am President and Chief Executive Officer of the Motion Picture Association of America, Inc. (MPAA). MPAA's members are among the leading producers and distributors of motion pictures, television programs, and home video materials in the United States.

The member companies of MPAA are:

Columbia Pictures Industries, Inc.
The Walt Disney Company
De Laurentiis Entertainment Group, Inc.
MGM/UA Communications Co.
Orion Pictures Corporation
Paramount Pictures Corporation
Twentieth Century Fox Film Corporation
Universal City Studios, Inc.
Warner Bros. Inc.

"The Anatomy of a Crime"

The New York Times, August 13, 1986:

"9:42 a.m. Gregory Hines and Mikhail Baryshnikov are having a tense confrontation on the [television] monitors [of the Tower Video store in Manhattan], which are playing [the movie] "White

Nights." On the floor [of the video store], one customer is selecting an armload of horror movies; his tastes run to "The Return of the Living Dead." 'I copy them and then watch them when I want them,' he explains. 'It's a lot cheaper. It's also a Federal crime.'

Hours pass. Quoting again from the Times:

"11:55 p.m. The customer who left earlier in the day with a bag of horror movies to copy hurries back into the store. 'I already made my copies, so I thought I'd return them,' he said. (See Attachment A.)

In the space of fourteen hours, including commuting time, this unnamed individual has succeeded in turning an armload of prerecorded videocassettes that he rented from his local video store into an armload of unauthorized copies that he can keep and view forever, lend to his friends, or swap with others.

And how very easy it was. He just connected up two VCRs (which takes only a matter of seconds), placed a copyrighted prerecorded cassette in VCR #1, placed a blank videocassette in VCR #2, pressed a few buttons, and presto -- he has transformed the blank videocassette into an identical copy of the cassette he brought home from the store -- cheap, easy and illegal.

This incident of copyright infringement, committed by this one individual in New York City, is duplicated thousands and thousands of times every day in homes throughout the United States. Indeed, as The New York Times article observes, "consumers and industry observers agree that it is a widespread practice... "

This thievery -- for that is what it is -- is commonly described as "back-to-back copying." It is becoming more popular and more prevalent with every passing day. The cumulative effect

of all this back-to-back copying will be to break the back of legitimacy, cripple American copyright owners, American video store operators, and, ultimately, American consumers.

I come here not to bury the videocassette recorder but to plead for protection against its darker infection. While the VCR has legitimate uses, it also has illegitimate ones. Like Gresham's Law, the latter threatens to disfigure the former.

My message is very straightforward:

Back-to-back copying is illegal. It violates the copyright protections guaranteed by this Congress in the 1976 Copyright Act. It is unfair and it is wrong. It must be stopped. Once the American public understands this, it will approve what needs to be done. We hope this hearing today will carry a powerful message, so that the American public will clearly understand what is at stake.

Back-to-back copying is harmful. It grows like kudzu. It is deadly to copyright owners. It is costly to local video dealers across the country. In the end, it is soiling to consumers, depriving them of the richness and variety that the prerecorded videocassette might otherwise provide.

Fortunately, back-to-back copying is an infection with a cure. The panel of witnesses I have joined here today will describe to you that cure: a simple, technological method that will foil back-to-back copying but will not interfere with legitimate uses of the VCR.

If this solution is to be implemented, Congress must do it.

Unauthorized Back-to-Back Copying Violates the Copyright Act

Please have no misconceptions about the application of the copyright law to unauthorized back-to-back copying of copyrighted prerecorded videocassettes and discs.

There is a popular misunderstanding, given life by some incautious members of the press, that such copying is exempt from copyright liability simply because it is done in the home. To

see in the pages of one of the nation's largest-circulation newspapers the statement "there is nothing illegal about making copies for private home use" is both scary and astounding! (See Attachment B.)

Such copying is against the law. Make no mistake about it.

I submit a brief memorandum prepared by Jon Baumgarten, former General Counsel to the Copyright Office and an acclaimed expert in copyright law, that lays to rest any doubt whether in-the-home, back-to-back copying violates the 1976 Copyright Act. (See Attachment C.)

In summary, Mr. Baumgarten says:

Back-to-back copying in the home of copyrighted videocassettes and discs violates the copyright owner's exclusive "right to reproduce" his or her work under Section 106(1) of the Act.

The fact is, Section 106(1) does not distinguish between commercial and non-commercial copying. Unauthorized noncommercial back-to-back copying, particularly in the aggregate, can be just as damaging to copyright owners as commercial piracy, and therefore such copying is an infringement.

Moreover, there is no limitation on copyright, express or implied in the Act, that would insulate unauthorized in-home copying from liability.

In particular, such copying is not a "fair use" under Section 107 of the Act, even under the U.S. Supreme Court's interpretation of that section in the well-known "Betamax" case (Sony Corporation of America vs. Universal City Studios).

When this decision is read with the care it deserves, there is no confusion. The Court's ruling was extremely narrow. It did not say "anything goes" with VCRs. It dealt solely and exclusively with a practice the Court calls "time-shifting" -- which it defines as the recording of a program from free, over-the-air TV to be viewed once at some later time and then erased, all within some unknown, but presumably brief, period.

Even under the Court's unusually expansive reading of "fair use," no argument can be made that a permanent copy of the entire contents of a prerecorded videocassette or disc comes under "fair use." None.

The prerecorded videocassette is a commercially-marketed product. It bears a price tag. Its commercial value derives exclusively from its sale or rental in the marketplace. To duplicate such a cassette is to sap its value. Every unauthorized copy made from a prerecorded videocassette potentially displaces a sale or rental of a prerecorded videocassette. It is as simple as that.

Unauthorized Back-to-Back Copying Slashes the Home Video Revenue Base

The production of motion pictures and video works is a high-risk enterprise.

Eight out of ten motion pictures fail to make back their total investment from theatrical revenues alone.

Six out of ten motion pictures never make back their total investment. Period.

These risks would be greater still if the home video market were not healthy and robust.

Dramatic changes are occuring in the markets through which the costs of motion picture production must be recouped.

A recent study commissioned by Merrill Lynch projects that movie theatre box office receipts, which today account for about 38 percent of all domestic film revenues, will by 1995 account for less than 16 percent of all domestic film revenues. I do not confirm that prophecy because the future is too obscure to map, but that forecast is like an open window on a cold dark night.

Meanwhile, home video is projected to grow from a 35 percent share of all domestic film revenues to a 75 percent share by 1995. Again, I cannot certify this projection. In the words of Sam Goldwyn, "Making predictions is very difficult, especially about the future."

But, these statistics do show that the future of the American motion picture industry is closely bound to the future of the home video industry.

Anything that threatens the vitality of the home video industry puts to hazard the ability of motion picture producers to meet the public demand for new entertaining works.

Unauthorized back-to-back copying is a malevolent threat to the creative future. Even as home video becomes an increasingly important means of recouping production costs, back-to-back copying displaces sales of legitimate videocassettes and discs, eroding the revenue base.

Back-to-back copying is not just a problem for the America feature film industry. It threatens the development of the promising new business of "video publishing," which includes hundreds of companies in addition to the major Hollywood producers.

More and more, we see new, original copyrighted works released first -- or exclusively -- to the home video market in the form of prerecorded videocassettes or discs.

This new business of "video publishing" includes diverse forms of entertainment and information programming:

-- home exercise programs featuring the likes of Jane Fonda, Debbie Reynolds, and Bubba Smith;

-- food preparation tapes featuring great American chefs such as Paul Prudhomme, Craig Claiborne and Julia Child;

-- programs of great events in American sports, such as historic championship ballgames and prize fights;

-- professional advice and counseling series such as Esquire Magazine's "Career Strategies" cassettes;

-- tapes to guide expectant parents, such as "The Lamaze Method" featuring Patty Duke;

-- and, I might add, a most effective cassette on public speaking, "Speak Up With Confidence," featuring Dinah Shore and a fellow who is too modest to reveal his name.

This just skims the surface of "video publishing." It runs the gamut of topics and interests. And, just like books, these tapes must pay for themselves through sales. When sales are

displaced by unauthorized back-to-back copying, the very financial base of "video publishing" is eroded.

This is important to remember: Back-to-back copying reduces the ability of producers to recoup their costs.

When producers are denied their rightful compensation in the marketplace, their ability to produce new, original works to meet consumer demand shrinks radically.

The variety, diversity and growth of the entire film and home video industry will be victims of back-to-back copying.

How Much Unauthorized Copying? Who is Harmed?

How big is the problem?

How much unauthorized back-to-back copying is going on today?

What trends do we see?

Who is harmed, and how?

Here are data drawn from a number of sources, including the A.C. Nielsen Company and Paul Kagan, a leading communications industry analyst.

As of May, 1986, Nielsen estimates that some 33.7 million households in the United States (about 39% of all TV households) have at least one VCR. Paul Kagan projects that by 1990 there will be over 56 million VCR households, accounting for 63% of all American TV homes. Ultimately, according to Merrill Lynch estimates, VCR penetration will peak at about 75% of all TV homes.

This is a phenomenal avalanche of VCRs.

But these numbers tell only part of the story.

What is even more revealing is the number of American homes that own or will soon own multiple VCRs, giving them instant in-home capability to make back-to-back copies.

According to Nielsen survey diary research, at mid-1986, one out of every seven VCR households owned two or more VCRs. That

means there were over four million multi-VCR households in the United States as of July 1st of this year.[1]

Looking down the road, Paul Kagan estimates that there will be about 17 million multiple-VCR households in 1990, and almost 35 million by 1995.

These data mean that more and more consumers will be able to make back-to-back copies. Nielsen survey data show what VCR owners say they do.

-- In deciding whether to buy a VCR, over one in five consumers said that the ability to copy rented or borrowed prerecorded cassettes or discs was an important consideration.

-- Over five million VCR owners (15.1 percent of all VCR owners in the U.S.) admit having used VCRs to copy rented, borrowed or previously purchased prerecorded videocassettes or discs in the past year.

-- By mid-1986, VCR owners owned over 72 million unauthorized copies made from rented, borrowed, or previously purchased videocassettes or discs. (This stands in stark contrast to the total number of legitimate prerecorded videocassettes sold to dealers between 1980-1985: approximately 95 million.)

Keep in mind, these figures on the incidence of back-to-back copying are undoubtedly low. As any survey research specialist would concede, under-reporting is commonplace where respondents are asked to admit that they engage in an illegal activity. Thus, the number of individuals who engage in back-to-back copying is unquestionably higher than those willing to report it.

From other sources, we learn about the consumer appetite for blank videocassettes -- the medium upon which the unauthorized copies are recorded -- and how these sales are expected to escalate.

Over 182 million blank videocassettes were sold to consumers in 1985... up nearly 80 percent from 1984 sales of over 109 mil-

---

[1] The Nielsen figure for multi-VCR households does not account for those VCR owners who rent or borrow a second VCR to make copies of prerecorded materials -- a very routine and inexpensive transaction. For example, a leading video store chain in the Washington metropolitan area rents VCRs for $9.95 a night. Thus, the number of households capable of back-to-back copying is considerably higher.

lion. That means there were over seven blank cassettes purchased for each and every VCR-in-use in just one year's time... vastly in excess of what would be needed only to record and make copies of home movies, or to record and erase for "time-shift" purposes. A leading tape manufacturer estimates that consumers will purchase an additional 275 to 300 million blank cassettes this year... almost three times the blank tape sales of just two years ago.

From these figures, we can reach some reasonable conclusions about who is harmed, and how.

When a consumer makes a back-to-back copy of a prerecorded videocassette, that means he is likely not to engage in at least one of three economic transactions that would otherwise take place at his local video store.

The back-to-back copy is likely to displace either (1) a potential purchase of a legitimate videocassette of the same work from the video store, (2) one or more future potential rentals of a legitimate videocassette of the same work, or (3) one or more future potential sales or rentals of a different work, which he would want to view if he didn't have the unauthorized copy available to view.

The consequence of any displaced sales or rentals is obvious: video retail stores, our primary customers for prerecorded videocassettes, will purchase fewer cassettes from us. Revenues they would realize from sales or future rentals of legitimate prerecorded cassettes are lost. Thus, the video store's investment in legitimate cassettes of future titles must be reduced.

Common sense tells us that reduced consumer demand leads to reduced retailer demand, leading in turn to reduced revenues to producers. When our customers are hurt, we are hurt.

Moreover, consumers themselves suffer harm from back-to-back copying.

The elegance of copyright is that it permits broad access to a work by permitting each consumer to pay a small price; but the sum of these consumer payments permits producers to finance cost-

ly productions, and also fuels investment in new creative works.

When a consumer avoids payment of a marketplace price for access to a work (through back-to-back copying), the return to the producer is diminished. So, then, the incentive to produce new works is also reduced.

As a consequence, the consumer loses access to new and diverse copyrighted video works. And the greatest injustice is that it is the honest consumer that suffers the most -- he does not benefit from the act of making unauthorized copies, but he is harmed (through reduced diversity of available video programming) by the unauthorized copying of others.

The end result? Everyone loses -- consumer, video retailer, and producer. And the longer unauthorized back-to-back copying continues unabated, the greater the harm.

Legislation Is Necessary for An Effective System

Copyright owners have taken all reasonable measures to discourage unauthorized back-to-back copying.

We have placed warnings against unauthorized duplication on our copyrighted videocassettes and discs. But, unauthorized copying grows without restriction.

More recently, technological advances have given copyright owners new and better tools to combat back-to-back copying in the home.

Copyright owners are now using certain "unilateral" protective technologies -- where the prerecorded videocassette or disc carries certain electronic signals intended to interfere with unauthorized copying. While these efforts have been helpful, their results have been mixed. Why? In part, because the continuing changes in VCR technology have tended to render the "unilateral" technology ineffective; and, in part, because

companies have designed and brazenly advertised to consumers new equipment expressly to "defeat" these systems.

We have reached an inevitable conclusion: the only truly effective protection against unauthorized copying must be a "bilateral" technology. This means not only must the prerecorded videocassette or disc be "encoded." But the VCR itself must also be equipped in such a way as to foil the act of unauthorized copying.

You will hear this morning from two companies that have developed "bilateral" anti-copying technologies. They will describe to you in understandable terms how their technologies work and what they would cost to implement.

A few brief observations:

-- First, by all indications, these technologies would be extremely effective -- on the order of 100% effective -- in stopping the sort of back-to-back copying that would otherwise choke our future.

-- Second, this technology is simple. All that's required is a very minor modification in the VCR's circuitry. The VCR looks the same. And, with one exception, it works the same. There is no loss in clarity of sight and sound in the recorded image, nor in ease and convenience of use.

Consumers could still playback legitimately rented or purchased prerecorded videocassettes and discs. They could make and copy home movies for friends or relatives. The only thing they could not do is take the property of copyright owners -- through back-to-back copying -- without authorization.

-- Third, these technologies place no additional burden whatsoever on video retailers or distributors, and indeed will help them sell or rent more legitimate copies of videocassettes. Anti-copying protection will be good for their business.

-- Fourth, these bilateral systems prevent back-to-back copying of prerecorded materials only if the copyright owner chooses to utilize the system to protect his or her work.

-- Fifth, as you will hear this morning from the developers of these two bilateral systems, their technologies would impose

(at most) nominal costs upon those copyright owners who choose to "protect" their works, and upon VCR manufacturers required to incorporate the anti-copying technology into their machines' circuitry.

These anti-copying technologies represent an important breakthrough in the effort to secure copyrighted works. But the key to them is that they are "bilateral": they require the full cooperation of copyright owners and VCR manufacturers.

The question is, what is the best way to be certain this new breakthrough technology resides in all future VCRs?

In this country, copyright owners are pursuing the possibility of encouraging foreign manufacturers of VCRs to incorporate such technologies voluntarily into their machines. To date, the manufacturers have been non-responsive. Our efforts continue through various channels. At this time, it is questionable that a negotiated agreement will be successful with all manufacturers in all countries where VCRs are made.

Against this background, we conclude that only through legislation can all manufacturers of all types of home video recording equipment be bound by the same requirement.

This would also respond to the concerns of companies such as Eastman Kodak, which markets an 8mm. videocassette recorder in the United States (manufactured for Kodak by a Japanese company). Kodak has publicly stated it would "welcome" anti-copying technology in its 8mm. machines, provided that this doesn't render their machines "less attractive than someone else's." (VIDEO WEEK, April 14, 1986)

This is a most reasonable stance. Any manufacturer would be reluctant to take measures that may be perceived to disadvantage it in competition against other uncooperative manufacturers. Only through comprehensive legislation can all manufacturers be treated equally, and no manufacturer gain undue advantage against any other by failure to comply.

Key Elements of Anti-Copying Legislation

What should anti-copying legislation look like?

First, it should protect the integrity of copyrighted works by rendering future VCRs incapable of making unauthorized copies of prerecorded videocassettes and discs. (This remedy would be prospective in nature, affecting only those VCRs entering the marketplace after the effective date of the legislation.)

Second, it should permit consumers to continue to record and duplicate home movies, and to playback legitimate prerecorded videocassettes.

The chief elements of such legislation would be:

-- a requirement that all future VCRs include a device capable of frustrating back-to-back copying of "protected" prerecorded copyrighted videocassettes and discs;

-- establish a required "level of effectiveness" that any anti-copying system must satisfy;

-- prohibit "black boxes" designed to defeat the anti-copying technology.

We believe our suggested approach comports with the key principles put forward by the Administration in its recent statement supporting the use of anti-copying technology in home audio recorders. Our preferred approach would not "retard technology" and "is adaptable to new technology"; it "avoids imposing additional costs on noninfringers"; it avoids undue government involvement in marketplace determinations; and it is "consistent with Administration efforts to encourage strong protection of intellectual property."

Moreover, we believe our approach is entirely consistent with the consumer's interest in enjoying the many uses of his VCR without additional cost or loss of convenience. It is a fair, simple technological solution to a mounting problem.

Congress Must Act Expeditiously to Stop Unauthorized Copying

We stand before you at the eleventh hour of the 99th Congress. Even as we speak, unauthorized back-to-back copying accelerates with increased velocity.

If the Congress were able to act today to stop unauthorized copying, it would not be a moment too soon.

By all indications, the gravity of the harm caused by back-to-back copying will have worsened by the time the 100th Congress is sworn in, because:

-- The importation of VCRs from abroad will continue at near-record levels. In 1987 alone, we estimate there will be an additional 12 million VCR households;

-- Low VCR prices will encourage the continued growth of two-VCR households. Every day, American dollars will feed other countries' trade surpluses with the U.S., while American copyrighted works, a valuable U.S. trade asset, shrink;

-- Clever minds in the electronics business will continue to dream up and market more new devices to make back-to-back copying easier, faster and cheaper (see Attachment D);

-- The foreign manufacturers of "dual-port" VCRs may well decide the time is ripe to invade America's borders, pillaging the American copyright;

-- Hour by hour, greater economic harm will befall copyright owners and video store operators.

All in all, Mr. Chairman, when the 100th Congress convenes, the situation will have become much more grim.

At that time, we will return to the Congress, the crux of our request much the same as it is today, though the landscape will be gloomier.

We pray this Committee will move beyond concern to action. We ask your help to achieve the proper balance between the interests of copyright owners and the interests of VCR owners, by protecting the beneficial uses of the VCR and prohibiting that which is harmful.

We need the help of the Congress. Now.

ATTACHMENT A

The New York Times, August 13, 1986
Page C17, Columns 1-6

One Day in the Video Rental Whirl

By LESLIE BENNETTS

It is one minute to nine in the morning, but already there are people waiting outside Tower Video as the doors are unlocked. For the next 15 hours, the store will be thronged with customers seeking gremlins and goonies, aliens and mass murderers, old-fashioned movie legends and rock stars with green hair, exercise tapes and lessons on everything from Italian cooking to waltzing with Betty White, not to mention Ronald Reagan's life story. As usual, it will be a busy day.

9 A.M. Frank Pace is the first customer. He is returning a copy of "Desperately Seeking Susan," and despite the movie's charms, he was not amused. "The tape had a lot of static," he complains. "Every half hour it needed to be cleaned again." The clerk doesn't charge him for the rental, and Mr. Pace leaves, looking mollified.

9:11 A.M. The likes of Madonna are not under consideration for Liliana Garcia, an opera buff who is contemplating the relative merits of "Cosi Fan Tutte" and "A Year in the Life of Plácido Domingo." Her choices, however, are broad: open from 9 A.M. to midnight, 365 days a year, the Tower outlet at Broadway and 67th Street is one of the city's largest video rental stores, offering 6,500 copies of nearly 4,000 different titles. With video-cassette recorders now found in more than one-third of all American homes and selling at a rate of more than a million a month, the rental and purchase of cassettes represented a $4 billion industry last year. Their popularity attests to the far-reaching impact video is having on leisure-time habits.

9:31 A.M. Tracey Fuller, a 27-year-old nurse who lives in Harlem, is browsing through the aisles. "Every time I pass a video store, I just have to look," she explains. "I'm a compulsive shopper. I don't watch television because television is boring. And why should I go to the movies if I can rent? I can watch these movies in my own house, and call my friends and say: 'Come on over. We'll watch video all night, play 'Trivial Pursuit,' cook and eat and play music.' "

9:42 A.M. Gregory Hines and Mikhail Baryshnikov are having a tense confrontation on the overhead store monitors, which are playing "White Nights." On the floor, one customer is selecting an armload of horror movies; his tastes run to "The Return of the Living Dead." "I copy them and then watch them when I want them," he explains. "It's a lot cheaper. It's also a Federal crime."

Copying movies is indeed cheaper than buying them; Tower rentals cost $2.50 (or $1.25 on Wednesdays, which are half-price days) and blank tape can be bought for $5, while purchase prices range from $20 to $80. Video-copying is against the law, but consumers and industry observers agree that it is a widespread practice nonetheless.

9:50 A.M. Martin Seif, a psychologist, is examining the titles in the "Family and Disney" section. "Kids today at the age of 2 know how to work VCR's," he says. "My son is 4; he showed the baby sitter how to do it."

1:45 P.M. James Pol and Colin McCall are crushed. Their entire vision of the afternoon has just been shattered: "Kid Creole and the Coconuts" is not available. "Yeah, there are other things to do in the world, but it's easier to pop a videotape into the VCR and just become a couch potato," says Mr. Pol, a high school student from Queens.

2:25 P.M. Eric Jacobson, a lawyer, has a mission. A friend has a $1,000 bet riding on who played the French attaché in "Topaz," and Mr. Jacobson is here to settle it. Dutifully, he writes down all the French-sounding names in the movie's cast. "A thousand dollars," he says, shaking his head, then heads back to his office to call his anxious friend.

3 P.M. Rick Timmermans, the store manager, is explaining that there are some things he refuses to stock — like "Faces of Death," a frequently requested title. "It's mostly about bizarre deaths," he reports. "They show autopsies, people eaten by sharks, victims of car accidents, that kind of thing. It's real morbid."

Tower employees often marvel at the taste of their customers, with whom "The Attack of the Killer Tomatoes" and "Eraserhead" rank among the most popular items. "Then there's the mystery of the

titles that just don't get returned," says Liz Bejarano, the assistant manager. " 'Texas Chain Saw Massacre' is one of them. 'Butterfly' is another. Don't ask me why anybody would want a Pia Zadora film."

There are also variations by neighborhood; patrons of the Tower Video outlet downtown, at Broadway and Fourth Street, tend toward more obscure or esoteric material, while customers at the stores on the Upper East Side and the Upper West Side display more conventional mainstream tastes.

3:25 P.M. On the monitors, where "Star Trek" is playing, the androids are threatening to take over all the humans in the galaxy. Louise Gottfried is contemplating children's movies. "They're very good for chicken pox," she says with a sigh. "My son would actually prefer to watch 'Rambo,' but I won't rent that." The remedial dosage selected instead was "The Journey of Natty Gann."

6:30 P.M. The after-work briefcase brigade — men in business suits with their ties loosened, women in suits and running shoes — has arrived, and Angelo Scuderi is renting "Back to the Future" for his 6-year-old son. "He's already seen it seven times, but we're having company tonight, and this is the baby sitter," he says. Mr. Scuderi's own habit is firmly in check, it seems. "I only rent about twice a week now," he says.. "It used to be a lot worse. The first month, I call it VCR fever — you want to watch everything you've never seen before." He straightens up and adjusts his tie with dignity. "Then you learn to control yourself."

7:30 P.M. Pat Ruggieri is picking out something to watch with her date, who is coming over at 9 P.M. "We originally talked about going out to see something, but it doesn't make sense to rush through dinner and race to a movie," she says. "This way we can just eat when we feel like it and then watch the movie. We'll probably order in." She would really like to see "Ryan's Daughter," she adds wistfully, "but he doesn't like romantic stuff."

11 P.M. The late crowd has arrived, and the store is crowded with customers ranging from an elderly couple holding New York City Opera programs to a young woman in a skintight wet-look red patent leather minidress. Adam Joseph, a 19-year-old college student, is selecting videos to keep him awake."My friend and I want to get tickets to the David Letterman taping tomorrow night, and apparently the line is immense and you have to go down there at 4 or 5 in the morning, so we decided to stay up all night," he says.

11:45 P.M. Voices are raised in the far aisle; Richard Roland and Sarah Leibowits are having a little problem. "We're here arguing on what to get," says Ms. Leibowits, a college student. "I want a musical, he wants 'Jewel of the Nile.' " She turns to her companion. "I want to see 'Hair,' " she says defiantly. Mr. Roland sighs. "She's already seen it 20 times," he says.

11:50 P.M. A salesclerk announces: "You have 10 minutes left to make your selection. The store closes in 10 minutes."

"This is getting difficult," Mr. Roland mutters.

11:55 P.M. The customer who left earlier in the day with a bag of horror movies to copy hurries back into the store. "I already made my copies ... I thought I'd return them," he says.

11:56 P.M. Ms. Leibowits and Mr. Roland have finally made it to the check-out counter. "I won," she says, smiling radiantly. "We're getting 'Hair.' "

11:57 P.M. Len Ganz, an advertising salesman, and two clerks are racing up and down the aisles looking for "Carnal Knowledge." "I know it's here somewhere," says one salesman anxiously, biting his fingernails.

11:58 P.M. "Got it!" the salesman cries. Everyone looks immensely relieved.

Midnight. The doors are locked. On this particular evening, no latecomers hurl themselves at the closed storefront in a paroxysm of thwarted expectation, as happens some nights. The last stragglers are checking out their videotapes; the clerk makes one final announcement on the public address system. In the soothing voice favored by doctors to tell children that everything will be all right, he says reassuringly, "We're closing now, but the store will open promptly at 9 A.M. tomorrow morning. You can always come back tomorrow."

ATTACHMENT B

New York Daily News, July 13, 1986

Video

MINE! THEY'RE ALL MINE!

As prices drop, home video libraries are growing

By RICHARD ZACKS
Daily News Video Columnist

A FEW YEARS AGO, the only people who could afford to collect videocassettes, then priced around $80 each, were the money-dripping likes of Michael Jackson, Elton John or Roberto Duran. Video collecting was actually news—every few months, you'd read in the gossip columns about some celebrity stopping by Video Shack to buy a rackful worth about $5,000.

The days of the exclusive club are over. Collecting video is no longer restricted to millionaires, and you won't make the gossip columns the next time you buy a tape.

The reason is simple. Prices for many top titles have plummeted from a wallet-cleaning $80 down to $30 or less. Some stores are offering used titles for as low as $5.

"We always sold a lot of 'Casablanca' at $69.95 but now that they've dropped the price, we're selling about 30 to 30 times as many," said Ed Weis, general manager of Movies Unlimited (1-800-523-0823), one of the nation's largest mail order houses.

CBS/Fox Video discounted 30 of its most popular titles—including "African Queen," "Casablanca" and "West Side Story"—to $29.98 in March and so far it has sold 1.5 million copies of films in the series. Walt Disney Home Video last winter ran a "Make Your Dreams Come True" promotion offering 21 titles for under $30 each and sold 1.6 million copies.

"People are starting to collect," says Jonathan Bender of Alexander and Associates, a market research firm specializing in video. He noted that 10% of all VCR owners now own more than 20 prerecorded titles.

The trend toward collecting started less than four years ago. In August 1982, Paramount Home Video offered "Star Trek II" for the then-startling price of $39.95.

"That announcement was like dropping an atom bomb on the industry," recalls Seth Goldstein, editor of the upcoming video trade magazine, Twice.

Since then, Paramount has led the movement—offering "Raiders of the Lost Ark," "Purple Rain" and, most recently, "Beverly Hills Cop," which became the top-selling video of all time so far, for $29.95. Now all the other major home video companies have followed suit.

Another factor fueling video sales is that more stores—other than the traditional video outlets—are carrying tapes. Department stores, bookstores and convenience stores are jumping aboard. Waldenbooks had a banner Father's Day this year hawking videocassettes as gift items. Also, mail order is becoming an increasingly popular way to reel in video without waiting on lines.

Predictably, people won't buy just any movie. That's why trade magazines like Billboard separate their weekly top-selling tape charts into rental and sales categories.

"They'll buy if they know they're going to watch it several times," says Michael Pollack, co-owner of New Video (224 W. 72d St.). "They'll also buy to give it as a gift or maybe it's their favorite movie of all time."

Exercise tapes and upbeat movies dominate the top of the current videocassette sales chart in Billboard. You can watch an exercise tape every day. Jane Fonda's "New Workout" (Kari/Lorimar, $39.95) consistently ranks as numero uno and the queen of the sweat set has two other titles in the Top 30.

The feelgood films in the Top 10 of sales include "The Sound of Music" (CBS/Fox, $29.98), "The King and I" (CBS/Fox, $29.98) and "Back to the Future" (MCA, $79.95)—all suitable for repeat viewings any rainy day. Past feelgood best-sellers are "Singin' in the Rain" (MGM/UA, $29.95), "White Christmas" (CBS/Fox, $29.95) and "The Unsinkable Molly Brown" (MGM/UA, $29.95).

As for kids, Disney titles, such as "Alice in Wonderland" and "Pinocchio" ($29.95 each) continue to do well. Anyone in the vicinity of a 3-year-old knows small kids can watch movies over and over and over again: 4-year-old Emily O'Donnell, after watching "Annie" about 30 times, now calls her actor-father Barry, "Daddy Warbucks." "She thinks she's Annie; we're a little worried," says O'Donnell.

What won't people buy?

While it may do well in the theater, violence doesn't sell in homevid form. "People like to rent slash and trash but they don't want to own it," says Marc Zubatkin, veteran chartmaker for Billboard. He points out that four of the Top 10 rental titles are extremely violent: "To Live and Die in L.A.," "Commando," "Death Wish 3," "Invasion USA," but none of the Top 30 sales titles fall into that category.

Also, downer movies don't sell well. "How many times can you watch "Agnes of God" without getting depressed?" asks Bender of Alexander & Associates.

And despite all the surge in videocassette sales, the vast bulk of video collectors do most of their collecting the cheap way: They record movies off cable or TV.

LAST YEAR, AMERicans bought 231 million blank tapes, up from 122 million in 1984, according to the International Tape/Disc Association. Lots of people are buying second VCRs to make copies off rented titles. (There's nothing illegal about making copies for private home use.)

Some collectors keep catalogues on computer disc; others use three-ring notebooks. Local video producer Archie Dolder likes to give guests a menu of video selections when they arrive for a party.

At the extreme end of the collecting trend are the fanatics. These folks track down obscure silent films, buy bootleg Japanese imports and are obsessed with finding the best stereo hi-fi sound.

So far, though, no shrewd companies have issued five or six different—and collectible—covers the way the Rolling Stones did with the album cover for their "Some Girls" album in 1978.

Don't be surprised when it happens.

Coming Soon

Out of Africa (MCA, $79.95), the Meryl Streep/Robert Redford mega-winner at this year's Oscars, arrives on videocassette Sept. 11. . . . Napoleon (MCA, $79.95), the classic silent film that Francis Ford Coppola resurrected, hits stores the same day. . . . Down and Out in Beverly Hills (Touchstone, $79.95), starring Bette Midler, Nick Nolte and Richard Dreyfus, arrives Sept. 23. . . . Industry sources say a lawsuit involving Yul Brynner's family could stop fresh copies of King and I (CBS/Fox, $29.98) from reaching video stores. Better buy now.

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For: Motion Picture Association of America

From: Jon Baumgarten

Re: "Back-to-Back" Copying of Prerecorded Video Cassettes and Video Discs

Date: September 15, 1986

At your request I have considered the question of unauthorized private copying of copyrighted motion pictures embodied in prerecorded video cassettes and video discs. In my judgment, for the reasons given below, such copying is a violation of the copyright owner's rights under the Copyright Act.

I. Prima Facie Infringement

The copying of copyrighted motion pictures by the duplication of prerecorded video cassettes and video discs is clearly a "reproduc[tion of] the copyrighted work in copies." See 17 U.S.C. §§106(1) & 101 (definition of "copies"); H.R. Rep. No. 94-1476, 94th Cong., 2d Sess. 61 (1976) and S. Rep. No. 94-473, 94th Cong., 1st Sess. 57-58 (1975) (reference to making "copies" includes the singular). Thus, "back-to-back" copying falls within one of the exclusive rights of the copyright owner (viz., the reproduction right) and -- unless exempted by other provisions of the Copyright Act -- is an infringement. For the reasons given in Parts II and III, there is no pertinent exemption.

II. The Act Does Not Exempt "Noncommercial," "Private," or Like Copying from Infringement

Although the history, structure, and intent of the Copyright

Act is clearly to the contrary,[1] it is occasionally urged that there are relevant "implicit" or "nonstatutory" exemptions to the copyright owner's rights. Put simply, these assertions are invented, wholly unsupportable myths.

Thus, it has been suggested that any "noncommercial use" is exempt from copyright. This is palpably false. Whether a use is of a "commercial nature" is only one factor among several to be considered in a separate fair use analysis (discussed below); it does not itself determine the legitimacy of any conduct. E.g., Sony Corporation of America v. Universal City Studios, Inc., 464 U.S. 417, 448-49 (1984) (noncommercial character "not conclusive"); see also, e.g., H.R. Rep. No. 94-1476, supra at 62 & S. Rep. No. 94-473, supra at 59 (no general exemption for non-profit activities). Indeed, "noncommercial" activities have commonly been held to be infringing. E.g., Macmillan v. King, 223 F. 862 (D. Mass. 1914); Wihtol v. Crow, 309 F. 2d 777 (8th Cir. 1962); Encyclopedia Britannica Educational Corp. v. Crooks, 542 F. Supp. 1156 (S.D.N.Y. 1982); Marcus v. Rowley, 695 F. 2d 1171 (9th Cir. 1983).

It is also occasionally asserted that the "internal" copying of a work, i.e., copying without distribution of copies to others,[2] is not an infringement. This notion is equally in error. See, e.g., H.R. Rep. No. 94-1476, supra at 61 and S. Rep. No. 94-473, supra at 57-58. ("Infringement takes place when any of the [rights in 17 U.S.C. 106] is violated: where, for example, a printer reproduces copies without selling them . . . The reference to 'copies' . . .although in the plural [is] intended . . . to include the singular...") (emphasis added); Supplementary Report of the Register of Copyrights on the General Revision of the U.S. Copyright Law, 89th Cong., 1st Sess. 16 (Comm. Print 1965) (rights to "reproduce" and to "distribute" independent of each other; "mere duplication of a copy may constitute an infringement even if it is never distributed"); see also, 17 U.S.C. §201(d)(2) (separation of exclusive rights). See generally, 2 Nimmer, Copyright §8.02[C] at 8-25 -- 8-26 ("One who makes infringing copies . . . infringes the copyright owner's reproduction right under Section 106(1), even if he does not also

infringe the Section 106(3) distribution right by sale or other distribution of such copies. . . . Therefore, subject to [the statutory exceptions] copyright infringement occurs whenever an unauthorized copy . . . is made even if it is used solely for the private purposes of the reproducer. . . ."); accord, e.g., Report of the Register of Copyrights on Library Reproduction of Copyrighted Works 16 n.7 (1983) (suggestion of a Court of Claims case under prior law "pointing toward a theory of a 'personal reproduction right'" is clearly "not a valid proposition under the 1976 Copyright Act").

As indicated immediately above, the rephrasing of the "internal" copying privilege in terms of an alleged "private," "home," or "personal" use exemption is equally baseless. Indeed, both the existence of such an implied exemption and its application to private recording of copyrighted works have been thoroughly discredited by (in addition to the authorities quoted above) extensive analysis. See, e.g., Nimmer, Copyright Liability for Audio Home Recording: Dispelling the Betamax Myth, 68 Va. L. Rev. 1505 (1983).3/ And, notwithstanding arguments put to it, the relevant part of the Supreme Court's decision in the Betamax case was predicated solely on the doctrine of fair use.

III. Back-to-Back Recording of Prerecorded Video Cassettes and Video Discs Is Not a Fair Use

The doctrine of fair use permits limited unauthorized uses of copyrighted works. It is codified in 17 U.S.C. §107, which provides certain "criteria" to be considered in determining whether a particular use is "fair." We will note the application of these criteria to back-to-back recording of motion pictures immediately below. However --because of distortions and misperceptions -- it must be immediately noted that the Supreme Court's "Betamax" decision did not condone all uses of video recording devices as fair use. The Court spoke only to the limited question of "time shift" off-air recording from free telecasts (on the evidentiary record then before it.)4/ It did not condone the use of video recorders, whether "private" or otherwise, for other purposes. See, e.g., Sony Corporation of

America v. Universal City Studios, Inc., 464 U.S. 417, 425 (1984) ("Betamax").

Application of the statutory criteria to back-to-back recording shows that it is not fair use:

(a) Purpose and character of the use

In Betamax, the Court concluded that individual time shifters' purposes were "non-commercial." It may be questioned whether that characterization is appropriate here; rather than merely increasing access to free broadcasts by providing temporary, additional viewing opportunity (the Court's view of time shifting), back-to-back reproduction substitutes unauthorized copies for rental or purchase of prerecorded video cassettes and discs, and hence appears quite "commercial" in motivation or effect. Moreover, and most importantly, after its decision in Betamax, the Supreme Court explained that:

> "The crux of the profit-non-profit distinction [in fair use] is not whether the sole nature of the use is monetary gain but whether the user stands to profit from exploitation of the copyrighted material without paying the customary price."

Harper & Row Inc. v. Nation Enterprises, 105 S. Ct. 2218, 2231-32 (1985) (emphasis added). Certainly, back-to-back recording of prerecorded motion pictures available in the home rental and/or sale markets would generally meet the underscored description: the user stands to enjoy the entertainment value of the work "without paying the customary price" -- i.e., the purchase or rental fee.

In any event, even if individual back-to-back recording were considered "noncommercial," neither the fair use doctrine in general nor the Betamax case exculpates it from liability.5/ It means, at most,6/ that the copyright owner must show some meaningful likelihood of harm [discussed below]. 464 U.S. 417 at 450-451.

Additionally, it should be noted that back-to-back recording is a purely "consumptive" use of a copyrighted work for its intrinsic entertainment value; it is not a "productive use" made for the purpose of creating a new work. In Betamax, the Supreme Court acknowledged that this would weigh against fair use, but concluded (only) that it was not "wholly determinative" in the

case of timeshifting free-broadcast programs. 464 U.S. 417, 455 n. 40. The consumptive or non-productive "purpose and character" of back-to-back recording thus argues against its characterization as fair use.

(b) The nature of the copyrighted work, and (c) the amount and substantiality of the portion used.

The Supreme Court has endorsed the principle that copying a work of entertainment, such as a motion picture, is less likely to be fair use than copying a news broadcast or other informational work. E.g., Betamax, 464 U.S. 417 at 455 n. 40; see generally, 3 Nimmer, Copyright §13.05[A] at 13-75. The Court has also affirmed that the copying of an entire work -- such as is involved in back-to-back recording -- generally is contrary to fair use. Betamax, 464 U.S. 417 at 450; see also, e.g., Walt Disney Productions v. The Air Pirates, 581 F. 2d 751 (9th Cir. 1978). Under the facts of the Betamax case itself, the Court gave little weight to these factors because off-broadcast "time shifting merely enables a viewer to see . . . a work which he had been invited to witness in its entirety free of charge . . . ." 464 U.S. 417 at 449. This description is wholly inapt in the case of back-to-back recording of commercially available prerecorded cassettes and discs. Thus, application of these two factors alone clearly diminishes -- and may even eliminate[7/] --any claim of fair use.

(d) Effect of the use upon the potential market for or value of the copyrighted work.

If a particular use adversely affects the value of any rights in the copyrighted work, it is generally not "fair." E.g., Iowa State University Research Foundation, Inc. v. American Broacasting Cos., 621 F. 2d 57 (2d Cir. 1980). The Supreme Court's decision in Betamax rested upon the conclusion that plaintiffs, on the record then before it, failed to show any meaningful possibility of injury. See 464 U.S. 417 at 451, 456. However, the Court acknowledged that fair use would be rebutted by a showing that "the particular use is harmful, or that if it should become widespread, it would adversely affect the potential

market for the copyrighted works." 464 U.S. 417 at 451 (emphasis added). The Court emphasized that "actual present harm need not be shown . . . nor is it necessary to show with certainty that future harm will result;" but concluded that (for clearly noncommercial use)8/ "some meaningful likelihood of future harm" should be shown. Id. It seems clear that back-to-back recording, creating the basis for direct displacement of rental and/or sale revenues, meets this test. Back-to-back copies serve as the functional substitute for marketed copies, the essence of injury to copyright owners. See generally, e.g., 3 Nimmer Copyright §13.05[B]. (Given the evolving distribution sequence of motion pictures, damage to post-home video [e.g., cable and broadcast] markets also seems likely, though unnecessary to prove.)

There are no other exceptions that would permit unauthorized back-to-back recording.

FOOTNOTES

1. Section 106 of the Act describes the various exclusive rights of copyright owners. The Act then sets forth, in great detail, specific limitations and exemptions on and to those rights (17 U.S.C. §§107-118). This scheme of carefully developed, balanced, and explicit limitation reflects a deliberate Congressional design that militates against the notion of generalized, implicit, or nonstatutory exemptions. See S. Rep. No. 94-473, 94th Cong., 1st Sess. 57, 59 (1975); H.R. Rep. No. 94-1476, 94th Cong., 2d Sess. 61, 62 (1976).

2. Of course, back-to-back copying may well involve lending, swapping, or other "distribution" of the unauthorized copy in any event.

3. See also, Tribe, Memorandum of Constitutional Law on Copyright Compensation Issues Raised by Proposed Congressional Reversal of the Ninth Circuit's Betamax Ruling at 31-36 (1981), pointing out that certain pre-1976 Copyright Act references in connection with another Act that are mis-relied upon by some to support an alleged home recording exemption for sound recordings are, for several reasons, wholly inapplicable to motion pictures in any event.

4. The Court's opinion was heavily influenced by its view of off-broadcast timeshifting as merely "enablin[g] a viewer to see . . . a work which he had been invited to witness free of charge" [417 U.S. 449], a wholly inapt depiction of back-to-back recording. The continued vitality of the Betamax decision for even off-broadcast timeshifting under contemporary market conditions has been questioned, but need not be discussed here.

5. See cases cited on page 2, supra.

6. Following both the views of some commentators and the Supreme Court's later decision in Harper & Row, Inc. v. Nation Enterprises, 105 S. Ct. 2218 (1985), it may be questioned whether even this portion of the Betamax opinion, and the attendant rebuttable "presumptions" of fair use for noncommercial purposes, survives outside the limited area of timeshifting. It seems unnecessary to engage in further analysis of this point, since the harm factor is present here. See discussion below.

7. See footnote 6, above.

8. Thus, given the application of criteria (b) and (c) and the non-productive nature of back-to-back recording, even this showing of actual or potential harm might not be required. See discussion in Part III(a), above.

ATTACHMENT D

TWICE (This Week in Consumer Electronics)
September 8-13, 1986

BEATING THE SYSTEM

Macrovision—The Mother Of Invention

Technology giveth video software security and technology taketh away. A universal anti-copy defeat system guaranteed to draw fire from the Motion Picture Association of America is slated for introduction in October at $279.95 by Showtime Video Ventures, upscale manufacturer and marketer of video signal processing, enhancing and special effects generating accessories.

SVV will call its new black box the Universal Stabilizer, and claims it will correct sync-related picture flashing, rolling, blanking or tearing induced by any anti-copy system, including Macrovision. While SVV will presumably promote the stabilizer as the way to end viewing problems some consumers have with copyguarded videocassettes, it will, of course, also make it just as easy to copy those tapes from one VCR to another.

What compelled Showtime to introduce the controversial product? Market research showed "consumers wanted one device to do it all" rather than separate boxes "to overcome problems induced by the five or six varieties of copyguard," says a SVV spokesman. □

64-775 0 - 87 - 2

ATTACHMENT D

Video Review Magazine, July 1986, p.85

DUPING CABLES AND ENHANCER ALL-IN-ONE

NOW! Make Dupes so Close to the Original You Can Hardly Tell Them Apart!

Is it the original or "Super Dupe"?

Boosts and Enhances Video and Audio Signals

To make profesional quality tape-to-tape copies, you need more than just cables, you need "Super Duper"!...duping cables and enhancer all-in-one.

"Super Duper" regains signal loss by boosting and enhancing video signal a powerful 3 dB...audio signal a booming 20 dB!

You can't make a dupe tape that's exactly like the original, but—with "Super Duper"—your dupes are so close to the original, you can hardly tell the difference.

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ATTACHMENT D

Billboard Magazine, August 1986, p.6

Firm Says New 'Killer' Can Defeat Vid Majors' Anticopying Process

This story prepared by Jim McCullaugh in Los Angeles and Tony Seideman in New York.

NEW YORK DT Electronics International Corp., a small electronics firm here, has developed the Video Copyguard Killer, a device it claims can defeat the Macrovision anticopying process used by video software manufacturers. The Killer will go on sale in September at a list price of $199.95.

Most home video majors use the Macrovision anticopying process, paying fees estimated at 10-25 cents per cassette. DT head Douglas Tam claims his unit completely "removes" the Macrovision encoding.

The Killer actually is designed to remove interference that Macrovision critics say sometimes impairs performance of encoded cassettes. However, it also enables consumers to make interference-free copies of Macrovision-encoded cassettes.

Tam expects to sell 1,000 units a month of the machine. He does not plan to spend much on marketing or promotion "because the item is very unique right now."

He acknowledges it is illegal to duplicate prerecorded videocassettes. "We don't endorse it, but it is possible, yes."

The appearance of the Killer does not surprise Gary Gwizdala, chief operating officer of Macrovision. "Frankly, we expected this to happen. The appearance of a product like this points out that Macrovision is, indeed, inhibiting copying at the levels it was intended," he says.

"Assuming the device does what it says—and I haven't seen the device—we will look at the patents surrounding its basic process and its application for defeating Macrovision. If there are any violations, we will take what we feel will be the appropriate action at that time," Gwizdala says.

Tam says he does not fear legal reprisals from video manufacturers. "We're not really worried that much over tape companies suing us or taking any legal action against us, because we don't endorse it to be used for that purpose [illegal copying]."

Cy Leslie, chief executive officer of MGM Home Entertainment, says he trusts Macrovision will develop technology to circumvent the decoding device. The Killer is probably "either a violation of patent or it can be defeated by a change of the circuitry," he says. "A slight change in the Macrovision apparatus will defeat it," he says, noting that the change can be made "instantly."

The Macrovision anticopying technology is being used by such industry majors as CBS/Fox, MGM/UA, Walt Disney Home Video, MCA Home Video, and HBO/Cannon Home Video. Discussions are in progress with most other major program suppliers, Gwizdala says.

ATTACHMENT D

Electronics International Corporation
100 EAST 12TH STREET · NEW YORK, NEW YORK 10003
(212) 529-2781

FOR IMMEDIATE RELEASE

FOR FURTHER INFORMATION:
212-529-2781, DOUGLAS TAM

VIDEO COPYGUARD KILLER

TO BE RELEASED IN SEPTEMBER

NEW YORK, August 8th - The latest industry figures show that almost all new releases of pre-recorded video tapes will have the latest copyguard on them. In the past few months, it has proven to be a great deterrent against illegal duplication.

However, on some monitors with direct video inputs, it can cause picture flashing, blinking, and jittering. Until now, there was no solution to this problem at all.

After months of extensive research, DT Electronics International Corp. has finally come out with the new Video Copyguard Killer to be released in September. It is the first and only device capable of removing all copyguard interference. In fact, it comes with a money back satisfaction guarantee.

The list of extensive features include: direct video input and outputs, power switch, bypass/enhance switch, image enhancer, video noise eliminator, and AC adaptor. Suggested retail $199.95.

NOTE: This device is sold with the express intent that it will only be used to improve home viewing. The unauthorized duplication of copyrighted material is illegal.

The CHAIRMAN. All right. Mr. Gehrke.

STATEMENT OF ROBERT GEHRKE

Mr. GEHRKE. Mr. Chairman, I represent the Training Media Distributors Association, more commonly known as TMDA. We represent, the association represents companies which provide off-the-shelf, video programs, mostly on video cassettes, for training in business, industry and government, and education.

Our industry consists of about 500 companies with total annual sales of about $700 million. In addition, we also provide films and video tapes for the Nation's schools, colleges, universities, and this represents a market of about $300 million.

We are also pleased to represent before this committee the Instructional Systems Assocation, which like TMDA, members provide off-the-shelf training films and videos, but they also compile special customized programs for their clients, and which the producer retains a proprietary interest.

TMDA and ISA members make their living from the sale and rental of copies of their copyrighted works. We do not show our works in motion picture theatres. They are not shown on cable.

We have no ASCAP to collect royalties when our works are performed. Illegal back-to-back copying is thus a life-and-death issue for us. It deprives us of our sole market: the sale and rental of legitimate copies of our video cassettes.

For this reason, we urge Congress to ban the importation and sale in the United States of two-port VCR's, whose primary value is the piracy of copyrighted works. We also support the position of the Motion Picture Association in seeking additional congressional action to combat unauthorized back-to-back copying.

The training media industry is mostly small businesses with sales of under $2 million annually. Many are truly cottage industries, yet their social, scientific and economic importance is truly great.

The training videos they produce teach millions of Americans everything from management to sales, to customer relations, safety, public health, computers, complex medical procedures, and drug rehabilitation and more.

Training videos are designed for use in very limited and specialized markets. The sale of 1,000 video copies of one of our programs, for example, is considered a success.

Because they cost a substantial amount to produce, but their potential market is small, and therefore the cost is high, $300 to $500 or more for a single copy.

Each copy we sell or rent may in turn be used to train dozens, or even thousands of employees. So, even though training videos cost a lot, they can provide very cost-effective education.

Our distributors send their products throughout the Nation. They are viewed on the premises of thousands of customers. Everywhere, the opportunity exists for illegal back-to-back copying behind closed doors and at remote locations beyond the reach of the copyright owner.

We estimate the VCR population in the organizations we serve to be as high as 3 million. We know of individual organizations that

have up to 2,000 VCR's. Yet, the TMDA industry study shows that our rates of sale have not kept pace with the growth of VCR's in the marketplace.

We know that the back-to-back copying of our works is rampant. It is an easy and cheap way for organizations that may need multiple copies of a given cassette to operate.

These organizations could buy a legitimate copy from our members. They could obtain a license from the copyright owner and duplicate their own copies. But too often they just steal them.

In just one case involving a TMDA member, a foodservice chain bought 8 titles and made 800 illegal copies. These practices seriously harm our market. We estimate that 30 percent of every sales dollar, as much as $300 million, is lost to piracy in our industry, we cannot endure such losses.

But please understand that TMDA member companies are not the only ones who suffer from unauthorized copying. So do our customers, who make legitimate uses. And so are the would-be customers we are unable to serve because of these revenues that we would reinvest are lost. We have investigation and litigation programs but—they have been somewhat effective, but they are limited. And what we have learned from that is that there is much, much more illegal activity going on out there than we have the economic power to reach. The time for Congress to act on new technology is now, before serious economic harm permanently disfigures our industry. Thank you.

[The statement follows:]

THE POSITION OF THE TRAINING MEDIA DISTRIBUTORS ASSOCIATION ON ILLEGAL BACK-TO-BACK VIDEO COPYING

Prepared By

JACK L. COPELAND

President of National Educational Media, Inc.,
Chatsworth, California, and
Chairman of the Copyright Committee of the
Training Media Distributors Association

and

ROBERT GEHRKE

President of Training and Educational Services, Inc.,
Frederick, Maryland, and
Member of the Copyright Committee of the
Training Media Distributors Association

The Training Media Distributors Association - TMDA - represents companies which provide off-the-shelf video programs, mostly on videocassettes, for training in business, industry, government and education. Our industry consists of about 500 companies with total annual sales of $700 million. In addition, we also provide films and tapes used in the nation's schools, colleges, and universities, with annual sales in this market of about $300 million.

We are also pleased to represent the views of the Instructional Systems Association on the issue before this Committee today. ISA member companies, in addition to providing off-the-shelf video training materials, produce customized training films and tapes for clients, compiled from materials in which the producer retains a proprietary interest.

TMDA and ISA member companies make their living from the sale and rental of copies of their copyrighted works. We do not show our works in motion picture theatres. Our programs are not broadcast on television or shown on cable. We have no ASCAP to collect royalties when our works are performed. Illegal back-to-back copying is thus a "life-and-death" issue for us. It deprives us of our sole market: the sale and rental of legitimate copies of our videocassettes.

For this reason, we urge Congress to ban the importation and sale in the U.S. of two-port VCRs, whose sole value is the piracy of copyrighted works. We also support the position of the MPAA seeking additional Congressional action to combat unauthorized back-to-back copying.

The training media industry consists mostly of small businesses with sales under $2 million annually. Many are truly cottage industries, yet their social, scientific and economic importance is truly great. The training videos they produce teach millions of Americans everything from management, sales and customer relations to safety, public health, computers, complex medical procedures, drug rehabilitation, and more!

Training videos are designed for use in very limited, specialized markets. The sale of a thousand copies of a given title is considered a success. Because they cost substantial sums to produce, but their potential market is small, training videos are relatively high-priced items; they may cost $300 to $500 per copy. Each copy that we sell or rent may, in turn, be used to train dozens, even thousands, of employees. So, even though training videos can cost a lot, they can provide very cost-effective education.

Training media distributors send their products throughout the nation. They are viewed on the premises of thousands of customers. Everywhere, the opportunity exists for illegal back-to-back copying behind closed doors and at remote locations beyond the reach of the copyright owner.

We estimate that the VCR population in the organizations and institutions served by TMDA members may be as high as three million. We know of individual organizations having as many as 2000 VCRs. Yet, TMDA's most recent industry study shows that our rates of sale of prerecorded videocassettes have <u>not</u> kept pace with the growth of VCRs in the market.

We know that back-to-back copying of our works is rampant. It is the easy and cheap way out for organizations that may need multiple copies of a given cassette. These organization could buy the copies from a legitimate distributor. They could obtain a license from the copyright owner and duplicate their own copies. But too often they just steal them! In just one case involving a TMDA member company, a foodservice chain bought eight copies and made 800 illegal ones!

These practices seriously harm the market for our programs. We estimate that 30% of every sales dollar -- as much as $300 million annually -- is lost to piracy! No industry can long endure such a loss!

But you must understand: TMDA member companies are not the only ones who suffer from unauthorized copying. So do our customers who make legitimate uses of our cassettes. And so do the many would-be customers we are unable to serve because revenues that we would reinvest to produce new copyrighted programs disappear due to piracy.

TMDA has an investigation and litigation program to combat piracy, and it has been reasonably successful. Yet the most important thing we have learned is this: There is much, much more illegal activity going on out there than we have the economic power to reach. The people in our industry are just too small to be their own policemen. Most unauthorized copying will never be detected.

When temptation and opportunity, the two handmaidens of theft, are coupled with the ease of copying and our inability to track it down, the end result is the destruction of the American copyright.

The Training Media Distributors Association opposes the sale of two-port VCRs, and supports the development of both passive and active electronic systems to block illegal back-to-back copy-

ing. We see no other current, practical solution to the devastating problem of piracy.

The time for Congress to act on new technology is now, before serious economic harm permanently disfigures our industry -- an industry with the important responsibility to train our nation's work force to be more productive and responsible. Please let us do our jobs, and stop the video pirates from doing theirs.

Thank you.

April 30. 1986

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The CHAIRMAN. Thank you. Mr. Valenti, you have testified today, that the back-to-back copying of prerecorded video cassettes should be stopped.

Would you support preventing other types of home-taping behavior such as taping from commercial television?

Mr. VALENTI. Mr. Chairman, at this time, I would not change anything. I do not condone anything. I do not oppose anything. The only thing that we are focusing on is back-to-back copying. That and that alone. All else would be left undisturbed.

The CHAIRMAN. And today you are proposing that Congress pass legislation to prevent home taping. Do you think that such legislation would have an effect on reducing the large-scale piracy of video cassettes that is occurring today?

Mr. VALENTI. Yes, sir. I think it would. I did not suggest stopping home taping, Mr. Chairman. What I am suggesting is to stop back-to-back copying of a full-length movie.

I am on my way to Japan in 3 days to discuss with the Japanese Government, and its population, the malignancy of piracy which is like a viral contagion in that country today, and I am hopeful that they will be responsive to some of the pleas which we will make.

The CHAIRMAN. Do you suspect that the video store owners that are renting or selling prerecorded video cassettes are also pirating those tapes?

Mr. VALENTI. Mr. Chairman, I daresay in a universe of 20,000 stores you will find some people who might be doing something illegal, and I have no doubt some of that does go on. But the vast majority of video dealers are honest people of integrity who do not indulge in anything like that.

The CHAIRMAN. The distinguished Senator from Illinois.

Senator SIMON. Yes. I thank you both for testifying.

Clearly, what we want to do is to encourage the creative arts. You are talking about the back-to-back copying here, but that really is not the whole agenda, is it? Does that really solve the problem?

Mr. VALENTI. Well, the problem is, as you are pointing out, quite spacious. How does one protect, as an author, as a creative proprietor, how does one protect this evanescent thing called a creative work that "flies on gossamer wings"?

How do you protect it in a world where there are so many ways to copy it? That is the essential problem, Senator. And we are trying to focus only on one segment of that overall problem, which is the back-to-back copying. I have no idea, what new magic will be raining from the skies 3 to 4 years from now, what new technological magic we will have that might make copying even easier. What I am suggesting right now is very simple. What one technological piece of magic has torn asunder, let another piece of technological magic restore, and that is what we are bringing to you today, just on that alone, Senator Simon, no more. But I promise you that the problem of how do you protect the computer software, how do you protect educational material that is going on—all of that is a problem.

And one final point. Suppose today, some scientists develop a microwave where you could put a book in, and in 4 minutes you

could replicate that book down to its binding? What would happen to writers in America today?

The libraries would be pillaged so everybody could copy and nobody would be buying books anymore, I daresay. That is the kind of thing that is apocalyptic in nature, but nonetheless, if you are in the creative business, Senator, you worry about it.

Senator SIMON. At one point we were talking about a small tax on tapes and on other devices, and frankly, I am sympathetic to that. I think ultimately you protect the whole industry including the people who make the tapes and the machines.

Is that a secondary priority at this point?

Mr. VALENTI. Senator, to be perfectly honest, I do not want to intrude on this one segment with something that might be in the foreseeable future. As of this moment, the answer is no. I do know, though, that other countries—Germany, France, Scandinavia, have all allowed private copying in the home, but they are also compensating creative authors by a copyright royalty on blank cassettes.

That is not part of our agenda. We have no plans to insert that in our agenda. All we are coming to the Congress is, one, understand this problem which enlarges with every increased VCR, and, two, to present to you a very simple, inexpensive, nonintrusive way to cure it. Very seldom do you have some cure which has all those descriptions.

Senator SIMON. Unfortunately, I am not going to be able to stay for the full testimony. I am going to have to be over on the floor, shortly. But I gather that my friend, Charlie Ferris, is not going to be in complete agreement with your testimony here.

From their viewpoint they lose the sale of this one type of machine, period. From your perspective, that is the only loss from the viewpoint of the sales industry?

Mr. VALENTI. Well, I think that if I were manufacturing VCR's, and I were smart enough to hire wise and able counsel like Charlie Ferris, I would take precisely that position.

Senator SIMON. He likes your statement so far.

Mr. VALENTI. And I would take that same position. We are not enemies of the VCR. I think Mr. Ferris would no doubt tell you what a great friend the VCR is to the creative world, and he is right. It has been a friend. But it has cost us. As we go up in VCR we lose attendance at theaters. That is going on. We have lost all of the sales of our full-length motion pictures to networks. That is a dying business, now, too. But it is a compensatory balance. For every loss there is a gain and for every gain there is a loss.

But we are saying it is wrong to take a full-length work of an author, and copy it in its entirety, in your home, or in the factory, or in your backyard, or wherever. It is wrong, and it ought not be allowed.

Mainly, the problem in stopping these things, Mr. Chairman, is that you never can figure out a suitable solution that does not inconvenience people, does not discommode the industry.

We have come up with one now that is simple. It is practically inexpensive, less than, say, 15 cents, and it stops back-to-back copying. That is all. Whatever else you are doing right now, continue it.

The CHAIRMAN. He was not here when you explained. You might want to tell him just what you had in mind.

Mr. VALENTI. What we have in mind, Senator, is very simple. CBS/Fox, Macrovision, a lot of people have come up with a device, and CBS/Fox is willing to give it away—they do not even want any money for it—and that is, you change the circuitry of a VCR. So all VCR's coming into this country after January 1 would have to alter their circuitry so that it would receive a signal from an electronically armed, prerecorded video cassettes, and when you try to hook up two VCR's, or double-port machines, or whatever other devices, the signal triggers the circuitry in the VCR and the copying is foiled.

But it absolutely has no effect on the quality of all other copying that you do. Moreover, all of the signals coming through your television set would come through just as they are coming now, and whatever you are doing when those signals come through you set you can continue to do, without disturbance. It is very simple.

And the VCR circuitry change, I am told by the scientists who will testify, costs less than 15 cents, maybe less than 10 cents per machine. That is all.

The arming is done by the people who manufacture their movies. They arm their prerecorded cassette, and then, when these two signals meet, the triggering takes place and the copying is foiled. Simple, undisturbing to all else, and it can be done immediately.

Senator SIMON. I thank you. I would just add, Mr. Chairman, it does seem to me we ought to be able to come up with some sensible answers that do protect the artist, the creative side of this industry, and yet do no harm to the industry as a whole. I hope something along that line can emerge. Thank you.

The CHAIRMAN. Do you have a statement you want to put in the record on this, or do you have any questions you want to ask?

Senator DENTON. I will reserve my questions until I return, Mr. Chairman.

The CHAIRMAN. Until you come back?

Senator DENTON. Yes, Mr. Chairman, until I come back.

The CHAIRMAN. He has to go to an American Legion meeting for a few minutes. He will come back and take charge while I go for a few minutes; then I will come back.

Is there anything else either one of you wanted to say?

Mr. GEHRKE. Yes, sir. Mr. Chairman, I just wanted to make clear that the Training Media Distributors Association is also not antivideo cassette recorder. We find it a very helpful tool. We would just like to keep it in its place.

I am reminded of a conversation I had with an official of a bank in New Orleans just recently, about 16 months ago. When they found out what kind of business we were in, they said, "We used to buy a lot and we used to rent a lot of the products that your members produce. We don't do that anymore." And I said, "Why not?" They said, "Well, it's very simple. We have the people bring their video cassettes from their home recordings into our office, we make copies of them here, and we find it excellent training material. We don't have to buy it anymore." And those are the types of things that we are concerned about.

The CHAIRMAN. So you and Mr. Valenti are together on this subject?

Mr. GEHRKE. Yes, sir.

The CHAIRMAN. You are on the same side.

Mr. GEHRKE. We support the Motion Picture Association's position as well.

Mr. VALENTI. And one final thing, Mr. Chairman——

The CHAIRMAN. Mr. Valenti.

Mr. VALENTI [continuing]. If I may, before we conclude. We do not want to go to war against anybody. We think the video cassette recorder is a marvelous technological device. All we are suggesting, very simply is, finding a way to protect full-length works, whether it is this gentleman's educational material, or a full-length movie, that is in a totally different form than what it comes through your television set.

This is a—it is like a book that you, you get it from a library, and that is all we are suggesting. I want to keep that in the proper focus.

The CHAIRMAN. Thank you very much. We appreciate the presence of both of you.

Mr. VALENTI. Thank you, Mr. Chairman. Thank you very much.

Mr. GEHRKE. Thank you, Mr. Chairman.

The CHAIRMAN. You can remain, or be excused, whichever you prefer.

[Material follows:]

[From the Video User, October 1983]

MAJORITY OF FIRMS VIOLATE COPYRIGHT—LOW BUDGETS, DIRECT ORDERS PRIME REASONS

(By Judi Stokes)

WHITE PLANES, NY.—Though to do so is illegal under present copyright laws (see related story, this page), television programs are video taped off-air for internal distribution in the majority of organizations polled recently by VIDEO USER, and video programming purchased "off the shelf" is replicated—without permission—by one of three.

The survey, conducted recently via questionnaries sent to 65 randomly chosen video managers nationwide, and responded to by 30, uncovered attitude and policy trends surrounding the copyright infringement issue as it relates to professional video.

Most striking of the survey's findings is that whether the copyright violations involve taping and distributing television programming, duplicating purchased software or using music, graphics and other materials without authorization for in-house productions, the prevailing justification amongst video managers is, as one respondent explained, "We're only using the material in-house. Chances are good we won't get caught."

Others indicated that they sometimes tape illegally because they're acting on direct orders from superiors and have little to say in the matter, or because they have neither the time nor the budgets to go through legal copyright clearance channels.

"The official company stand is that we never violate copyright laws because we know it's illegal. But unofficially, we do it anyway," said one video manger. He has a lot of company. For starters, the survey showed that more than half the companies—56.7%—have taped programming off-air for in-house distribution. Of those, most tape fewer than three programs per week on average, and 64.7% retain the copies after they are used. Several noted that those most often taped are news programs.

The survey respondents clearly draw a distinction between copying programming off-air, and replicating programming the company has purchased. Still, one-third (33.3%) of the managers indicated they sometimes make multiple copies of software the company buys. One of the respondents explained the infringement with, "Even when my superiors are told about the copyright laws, they go ahead and order us to duplicate films and tapes."

One-third of the respondents also indicated they sometimes use music, graphics and other materials—without first obtaining copyright clearance—when producing programs. These appear to be "violation of convenience." As one manager put it, "On the rare occasion that we do use copyrighted music, etc., it's for a duration of less than 10 seconds, and it's not worth the hassle and expense of licensing." (See related story on music libraries in this issue.)

We also asked the managers to describe their attitudes and policies regarding question, indicating that few have strigent guidelines to follow, and deal with copyright on a case-by-case basis.

Just over 46% of the managers indicated they do use copyrighted material, but pay for it. Still, 40.7% said they see little harm in using pieces of copyrighted material for internal use, and 13.3% see little harm in copying (or using) entire programs, songs, etc. for internal use. Only 6.6% responded that they don't use copyrighted material because they can't, or won't pay for it.

Surprisingly, only two of the 23 managers responding to a question on their reasons for sometimes violating copyright law, indicated that they disagree with the copyright laws, and another said he didn't realize clearance had to be obtained, or didn't know how to go about it. The remainder—a whopping 73.3% of the sampling—cited "other" reasons for using materials without clearance.

Here, the managers offered telling explanations of why they use copyrighted materials without authorization. "Too much trouble, too little time, and no financial loss/damage occurs" . . . "Internal company pressure" . . . "Time constraints" . . . "We are not making a profit by utilizing material, nor are we exchanging it for any money or service" . . . "Expediency" . . . "Company does not want expense."

And it is clear that many video managers are just following orders when it comes to violating copyright. Others have drawn the line on what their departments will, and will not do. But in all, a hefty 43.3% of the group, responding to a question on how their own copyright philosophies compare with those of their superiors, indicated that there is disagreement. This tops the 40% who said they agree with management; 16.7% did not respond to the question.

The following is a sampling of responses to the question, "Do your superiors feel as you do about copyright?" "No. They don't think they'll get caught" . . . "Our company has a loose interpretation of the law" . . . "No. We've had many requests that would violate copyright law and we won't do it" . . . "No, I'm just following rules" . . . "No. By and large superiors just want their program requests fulfilled" . . . "No. They feel there is no problem" . . . "I seem to be the only one concerned about it. Their attitude is, do it."

Those who indicated an agreement with management on copyright issues offered such explanations as, "We do not feel the risk is worth it" . . . "Compliance with the law is our department's responsibility" . . . "Orders are, no violations" . . . "Superiors feel the way we do after we explain property rights and penalties."

Those companies that do violate copyright law do so, the survey showed, with little worry of getting caught. Almost half the managers (46.7%) responding to a question on how likely they think it is that they'll be prosecuted, said they are not concerned. Typical explanations included: "An army of millions would be needed to police everyone" . . . "There's little likelihood of our ever being noticed" . . . "There are no adequate checks and balances monitoring program usage" . . . "We won't get caught; our programs are shown in-house only."

Twenty percent of the mangers, however, are worried about prosecution. One respondent noted, "Copyright is hot issue now, and people are going after violators to make a point." Another manager said he copied the BOCES ruling (in which BOCES was fined for copying and distributing television programming) and distributed it to those who have asked for bootlegged tapes, with a memo saying the company couldn't afford to pay fines if prosecuted.

Considering that one-third of the respondings said they sometimes use music, graphics and other materials in productions without authorization, and just over that amount have replicated purchased software, it was surprising to find that 84% of the 25 managers who have paid a program supplier for rights to copy or use materials, believe they got their money's worth.

The "Betamax Case," which is still kicking around in the courts, and may result in a surcharge being levied on blank video tapes or VCRs to appease copyright holders, is seen as little threat by more than half (56.6%) of the managers, many of whom believe it will affect consumers only. But those concerned about its impact are fearful the tax will, as one respondent put it, "drive program costs sky high."

One manager said he hopes exceptions will be made for in-house productions, while another said companies would not derive any benefit from the tax, and accused Jack Valenti and the executives of the Motion Picture Association of America

with being "greedy old-timers looking for a free ride." One respondent fears that if a tax is imposed on tapes purchased by corporations, "our clients will feel as if they have paid a royalty fee which entitles them to pirate material at will. The job of keeping them straight will be harder."

But perhaps the response that best sums up the video manager's copyright adherence dilemma came from one manager who commented, "Any increase in costs is perceived as a reason to cut back in production. If we have enough increases, our department will go out of business."

COPYRIGHT SURVEY AT-A-GLANCE

Following are the questions as they appeared in the video user copyright survey. Thirty responses were received.

1. Do you ever tape programming off-air for distribution within your organization? Yes: 56.7%; No: 43.3%.

2. Do you ever make multiple copies of software your company has purchased? Yes: 33.3%; No: 66.7%.

3. When producing programs, do you sometimes use music, graphics or other materials without first obtaining copyright clearance?

Yes: 33.8; No: 66.2%.

4. How would you describe your attitude and policy regarding copyright as it relates to your department's activities?

We see little harm in using pieces of copyrighted material for internal use: 40.7%.

We see little harm in copying (or using) entire programs, songs, etc. for internal use; 13.3%.

We do use copyrighted material, but pay for it: 46.4%.

We don't use copyrighted material because we can't, or won't pay for it: 6.6%.

5. If you have used copyrighted material without obtaining clearance, is it because:

You disagree with the copyright laws: 6.7%.

You didn't realize you had to obtain clearance, or didn't know how to go about doing so: 3.3%.

Other: 66.7%.

No response: 23.3%.

6. Do you superiors feel as you do about copyright?

Yes: 40%; No: 43.3%; No response: 16.7%.

7. If you do sometimes violate copyright laws, are you concerned that you might be prosecuted?

Yes: 20%; No: 46.7%; No response: 33.3%.

8. If you have ever paid a program supplier for rights to copy or use materials, do you think you got your money's worth?

Yes: 84%; No: 16%.

9. Do you think the Betamax Case, which may result in a surcharge being levied on blank tapes or VCRs to appease copyright holders; will affect your video operation?

Yes: 43.4%; No: 56.6%.

Mr. CHAIRMAN. Mr. James Fifield, president, CBS/Fox Video. Would you come around, Mr. Fifield. Mr. John Ryan, president of Macrovision. If you gentlemen would come around.

We will be glad to hear from you, Mr. Fifield. You may proceed.

STATEMENTS OF A PANEL CONSISTING OF JAMES FIFIELD, PRESIDENT, CBS/FOX VIDEO, NEW YORK, NY; AND JOHN RYAN, PRESIDENT, MACROVISION, TORRANCE, CA

Mr. FIFIELD. Mr. Chairman, my name is James Fifield, and I am the president and chief executive officer of the CBS/Fox Co., which is a joint venture between CBS and 20th Century Fox Film Corp.

The CHAIRMAN. Now speak into the microphone and speak out so we can all hear you.

Mr. FIFIELD. All right. CBS/Fox manufactures and distributes prerecorded videocassettes and videodiscs under three different labels: CBS/Fox Video, Playhouse Video, and Key Video.

I am here also to discuss the need for legislation requiring that all future VCR's marketed in the United States to contain special circuitry, which would prevent the unauthorized duplication of copyrighted videocassettes and videodiscs.

The CHAIRMAN. That is what Mr. Valenti recommended?

Mr. FIFIELD. Yes; I am also here to give you a short demonstration of an anticopying system that has been developed by CBS/Fox, not for its own profit, as Mr. Valenti said, but to enforce existing copyright law that would be for the benefit of the entire industry. I am not a copyright expert, nor am I a lawyer, but I do understand that one of the purposes of the copyright law is to balance the copyright owners' right to compensation with the public access to the information which he, or she, has created.

Today, as Mr. Valenti stated, that relationship is out of balance. We are seeing an increasingly large violation of our copyright laws in the country, and as more and more homes become equipped with VCR machines and multiple VCR machines, two or more machines in homes, I feel that the problem that exists today will continue to become a larger and larger one.

Mr. Valenti outlined how the industry is harmed, in detail, and I will not dwell on that, and I do make similar statements in my written testimony.

But do understand, Mr. Chairman, that as a purchaser of copyright material, we look at someone's material and place a value on that product based on an estimate of how many units of that particular product that we can sell in the marketplace.

In turn, once we have made that product available, it is then sold to wholesalers and retailers who in turn rent it. They, too, are purchasing the prerecorded video cassette based on an estimate of the demand for that product in the marketplace from the consumers who will come in and rent it.

To the extent that back-to-back copying exists, or continues to grow, it will undermine the retailers' ability to rent that product out the number of times required for him to recoup his investment.

Therefore, if more and more people are able to illegally copy the material, then of course his rentals go down, which in turn causes the retailer to order less the next time which ultimately forces a company like CBS/Fox to place less value on future copyrighted products that we would purchase.

It is a growing vicious circle dealing with protecting rights, and protecting the value of those rights, but still letting the consumers have wide access to copyrighted material.

Mr. Valenti also talked about ways which we have to reduce illegal copying, and I want to give you a demonstration of an anticopying device that CBS/Fox has developed.

I will ask Barry Schwab, who is director of our engineering group at CBS/Fox, to show you some tapes, which will demonstrate how a bilateral system, one which requires a specific circuit be built into each VCR, that when combined with a prerecorded cassette that has been encoded with a repetitive marker signal disrupts the picture that is being copied making it unacceptable for viewing.

[The statement follows:]

TESTIMONY OF

JAMES G. FIFIELD

PRESIDENT AND CHIEF EXECUTIVE OFFICER

THE CBS/FOX COMPANY

ON UNAUTHORIZED BACK-TO-BACK COPYING OF COPYRIGHTED PRERECORDED VIDEOCASSETTES AND VIDEODISCS

Mr. Chairman, and Members of the Committee:

My name is James Fifield.

I am President and Chief Executive Officer of The CBS/Fox Company, a joint venture between CBS Inc. and Twentieth Century Fox Film Corporation which manufactures and distributes pre-recorded video cassettes and videodiscs under three different labels: CBS/Fox Video, Playhouse Video, and Key Video.

I am here today to discuss briefly the need for legislation requiring all future VCRs marketed in the U.S. to contain special circuitry which would prevent the unauthorized duplication of copyrighted video cassettes and videodiscs which are encoded.

I am also here to give you a short demonstration of an anti-copying system developed by CBS/Fox, not for its own profit but to enforce the existing copyright law for the benefit of the entire industry.

A few months ago, one of the two leading consumer video magazines candidly acknowledged that "One of the hushed-up facts of video life is that lots of rental customers are building program libraries the easy way: by taping rental copies."* This same magazine's cover story was devoted to the methodology for "dubbing" -- or duplicating -- recorded video cassettes.**

You don't need a scientific survey to tell you that the home video industry has a serious and growing problem with the unauthorized home duplication of copyrighted video cassettes and videodiscs. For example, Larry Bigelow of Bigelow Video, a retail outlet in St. Louis Park, Minnesota, says:

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* Video, April, 1986, page 6.

** Id. at 75-77, 124.

"Home taping of cassettes is a problem. It cuts into our sale and rental revenues when customers can watch copies for nothing."*

I am not a lawyer or a copyright expert, but I do understand that one of the purposes of any copyright law is to balance the copyright owner's right to compensation with the public's interest in wide access to knowledge and information.

Today that relationship is seriously out of balance -- and threatens to become even more so unless something is done to effectively enforce existing copyright law.

Home video is a medium that represents everyone's ideal -- where the public, as the industry's slogan puts it, can "watch what you want, when you want."

Home video is more than just movies. It's also music, culture, instructional, sports, and religion, as well as dozens of other programming categories.

Home video is also a medium in which programming is easily accessible to consumers. Cassettes and discs can be obtained from not only the approximately 25,000 video specialty stores in the U.S. today, but also from supermarkets, bookstores, convenience stores, various mass merchandisers, and the like.

Consumers can rent pre-recorded video cassettes for as little as 99¢ a night, can buy them for as little as $9.95, or can, if they wish, record many off television.

When so many video titles are so conveniently available to consumers, when they can be rented for less than a dollar or purchased outright, and when programming can easily be recorded off television, is there any reason or justification for also allowing consumers to duplicate pre-recorded video cassettes?

I realize that this kind of home copying is already against the law, but the law as it stands can't be enforced. No one would even remotely suggest that we intrude ourselves into people's homes to find those who are violating the law.

Rather, this is a situation where the letter and spirit of the law can be enforced through technological means -- means which are simple, inexpensive, inoffensive, and do not interfere with other, lawful uses of video recorders.

Such means exist today, and in a few moments Barry Schwab, our Director of Engineering, is going to show you a demonstration tape about how our anti-duplication system works.

In short, we're not here to suggest legislation expanding the scope of the current copyright law, but rather to recommend legislation which would make it possible to more effectively enforce existing law.

Let me address just two other points: How the industry is harmed by home

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* Video Insider, September 15, 1986, page 41.

duplication, and the discussions we have already held with VCR manufacturers about this subject.

How the Industry is Harmed

As you may know, home video is an industry in which companies like CBS/Fox -- which the trade calls "suppliers" -- produce pre-recorded video cassettes and videodiscs and sell them to wholesalers or directly to retailers.

The titles we distribute include theatrical films produced by Twentieth Century Fox, music titles produced by CBS, other films we acquire from other producers, children's programming we acquire from various sources, as well as a wide variety of other programming. Other suppliers not only acquire material from outside sources, but produce it themselves; the most famous example, of course, is "Jane Fonda's Workout."

In all cases, the amounts which suppliers spend to acquire or produce home video titles is substantial and can often amount to millions of dollars for a single title.

We are not talking about suppliers located just in New York and Hollywood, but in such other places as St. Paul and Bloomington, Minnesota; Tulsa, Oklahoma; Racine, Wisconsin; Orem, Utah; Providence, Rhode Island; Indianapolis, Indiana; Weston and Stamford, Connecticut; Oak Forest, Illinois, West Long Branch and Mount Laurel, New Jersey; and Davenport, Iowa -- to name just a few!

All suppliers, not just CBS/Fox, recoup their investments by selling a certain number of copies of each title to wholesalers or retailers based on retailer expectations of consumer demand.

To the extent that people copy rented cassettes and view them repeatedly or lend them to their friends, the number of "turns" (rentals per cassette) retailers are able to achieve is reduced, thereby making it more difficult for them to recoup their investments. This also induces retailers to order fewer copies of each title, since their "rental base" has been reduced.

In addition, to the extent that people copy rented cassettes to build their own libraries, the market for sales of pre-recorded videocassettes to consumers is reduced. Why buy it when you can rent it and copy it?

The damage to the industry is obvious. We can quibble about the precise amount, but not the fact.

In essence, suppliers are totally dependent on the health of retailers. Home copying of pre-recorded video cassettes undermines a retailer's rental and sale market. The retailer feels the impact immediately, but suppliers end up feeling it in terms of reduced purchases of cassettes by the retailer.

It is also obvious that the "home duping" problem is going to become more significant as VCR penetration of TV households continues to rise. It is obviously easy to take a VCR over to your neighbor's house and connect it up with his. Also, the number of "multi-VCR homes" (homes which have more than one VCR) is growing rapidly; some estimates say that there are already 4,000,000 such homes in the U.S. -- and Paul Kagan Associates predicts there will be close to 35,000,000 "multi-VCR homes" in 1995.*

In short, the home video industry has a major problem which can be corrected with better enforcement of existing copyright law.

We aren't sitting by idly, and, in fact, many suppliers of pre-recorded video cassettes, including CBS/Fox, are already using the existing Macrovision anti-duplication system -- a "unilateral" system in which pre-recorded video cassettes are encoded, but where the effectiveness of that encoding in preventing unauthorized duplication is limited by the lack of standard, common specifications for the VCR circuitry which "triggers" the system.

The only completely effective anti-copying system must be "bilateral." In other words, not only must the pre-recorded video cassettes be encoded, but there must be a specific circuit in each VCR which would be "triggered" to prevent the copying of encoded cassettes.

It was with this simple fact in mind that the anti-copying system you are about to see was developed.

With this system, the pre-recorded video cassette is unobtrusively encoded with a repetitive "marker" signal in the picture. This causes no disturbance in normal playback.

But when a copy is made, specific circuitry in the recording VCR detects the presence of the "marker" signal and produces a copy where the picture is interrupted for 15 to 20 seconds at a time periodically throughout the program. The copy, in short, is unacceptable for normal viewing purposes.

Of course, it is possible to make equipment which would remove the "marker" signal, but the only reason for using such equipment would be to make an unauthorized copy. Such equipment would clearly constitute what Mr. Valenti called a "black box."

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* The VCR Letter, August 18, 1986, page 6.

Discussions with the VCR Manufacturers

Discussions with Japanese VCR manufacturers about the use of "bilateral" anti-copying technology have already been held in the United States, Japan and Europe. Why the Japanese? Because although they don't manufacture all VCRs, they own the relevant patents and license their use under any conditions they choose to impose.

We at CBS/Fox have held numerous discussions with Japanese VCR manufacturers, and have even flown our executives to Tokyo for this purpose alone. Other suppliers of pre-recorded video cassettes, such as Paramount, Warner, MCA and Walt Disney, have also discussed the issue with the Japanese.

The VCR manufacturers have raised three "reservations" about a proposed bilateral anti-copying system, and I want to treat each of them in turn.

First, some claim that an effective bilateral anti-copying technology doesn't exist. Well, that's just not true -- as you're about to see today.

Second, the Japanese claim that even if an effective bilateral anti-copying technology does exist, it will be too expensive to employ. This also isn't true. Putting the required "triggering" circuitry in VCRs would necessitate only minor redesign costs which, when amortized over the more than 10,000,000 VCRs which the Japanese ship to the U.S. each year, would add pennies to the cost of each VCR.

With respect to these first two "reservations," I want to state openly here what we have already said in private: We are more than willing to sit down with the VCR manufacturers and have them examine our anti-copying system from top to bottom as to effectiveness and cost.

The third "reservation" raised by the VCR manufacturers is that they can't adopt a bilateral anti-copying system for their VCRs because they'll be "competitively disadvantaged" against other manufacturers' VCRs which don't include such anti-copying circuitry. Some of them indicated they would not object to a legal requirement that all future VCRs include anti-copying circuitry, and that is why we are here today.

In short, we at CBS/Fox will undertake to satisfy the VCR manufacturers as to the first two "reservations." Only this Congress can address the third "reservation."

It is worth noting here that we have already had our anti-duplication system tested independently by Andrew B. Lippman, who is well known for his work in advanced and sophisticated television systems at the Media Laboratory of the Massachusetts Institute of Technology (MIT), and by CBS Technology Center, which is not a part of CBS/Fox. Both of them have suggested minor modifications which we are now incorporating, but both have also concluded that it is a highly effective anti-duplication system which presents no problems when pre-recorded video cassettes are played back in their normal course.

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Allow me to conclude with two brief observations:

At no time in any of our discussions with VCR manufacturers have they ever taken the position that consumers have the right to duplicate copyrighted pre-recorded video cassettes. I think this is significant, for it indicates clearly that we're talking only about the specific "how" that prevents duplication without putting any VCR manufacturer at a competitive disadvantage.

Copyright owners, whenever they seek legislation, are always asked to show "harm." But what "harm" can there be, to either VCR manufacturers or consumers, from requiring adoption of the kind of anti-copying circuitry we have described here? I don't think there is any. If copyright is a "balancing" process, legislation requiring VCRs to contain anti-copying circuitry for pre-recorded video cassettes and videodiscs will help to restore the balance between consumers, VCR manufacturers, and the suppliers, wholesalers and retailers of home video programming.

I thank you for your attention.

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Attachment: Chart appearing in The VCR Letter, August 18, 1986, page 6, showing the projected growth in VCR homes and "multi-VCR homes" in the U.S. through 1995.

10-YEAR PROJECTIONS OF VCR UNITS IN U.S. HOMES

Year	Total Annual VCR Shipments (mil.)	Annual Percent Increase	VCRs for Households (mil.)	Replacement of Obsolete Machines (mil.)	Annual New VCR Homes (mil.)	Cumulative VCR Homes (mil.)	Annual Percent Increase	TVHH (mil.)	VCR Homes % of TVHH	Multiple-Set Factor--% of VCR Homes
1985	11.9	+59%	11.305	.736	10.066	24.105	72%	85.5	28.2%	5%
1986	12.5	+ 5	11.625	1.196	9.481	33.586	39	86.5	38.8	10
1987	12.5	0	11.500	1.769	8.461	42.047	25	87.5	48.1	15
1988	11.5	- 8	10.465	2.425	6.700	48.747	16	88.5	55.1	20
1989	10.0	-13	9.000	3.214	4.629	53.376	9	89.5	59.6	25
1990	10.0	0	9.000	3.829	3.978	57.354	7	90.5	63.4	30
1991	11.0	+10	9.900	4.691	3.859	61.213	7	91.5	66.9	35
1992	11.0	0	9.900	5.920	2.843	64.056	5	92.5	69.2	40
1993	12.0	+ 9	10.800	7.021	2.606	66.662	4	93.5	71.3	45
1994	12.0	0	10.800	7.942	1.906	68.568	3	94.5	72.6	50
1995	12.0	0	10.800	8.692	1.406	69.973	2	95.5	73.3	50

Column Notes:

4 - Takes into account VCRs purchased for the non-consumer market (hospitals, offices, schools, government, etc.) calculated as a percentage of total annual shipments--beginning with 1985, 5%, 7%, 8%, 9%, and thereafter 10%.

5 - Derived from a PKA formula assuming that 95% of all machines of 1975-1979 vintage are gone by 1990, 95% of all 1980-1982 machines are scrapped by 1994 and all units shipped after 1982 have a seven-year life cycle.

6 - Based on annual shipments minus institutional use, obsolescence and multiple-set factor (column 11).

11 - The average U.S. VCR home is assumed to have 1.05 VCRs in 1985, 1.5 by 1995.

© 1986 THE VCR LETTER. Estimates of Paul Kagan Associates, Inc., Carmel, CA.

The CHAIRMAN. Did Mr. Ryan want to make his statement, first, or wait until——

Mr. RYAN. I will wait, Senator.

Mr. FIFIELD. He said he would wait.

The CHAIRMAN. Now these lights are so bright, I do not know whether we can see. If these lights here could be eliminated, we could see it. Who controls these lights? Those are TV lights. If they could be cut off for a few minutes. Now, that is good. OK. All right. You may proceed.

Mr. SCHWAB. The first segment shows the results of normal playback by the VCR owner, the normal, what we would call legitimate use.

[Film presentation.]

Mr. SCHWAB. This, again, is the normal playback that a viewer sees when looking at a marked, or armed cassette.

The CHAIRMAN. I cannot hear you. Talk into the microphone so we can hear you.

Mr. SCHWAB. OK. The next segment shows the results of making a copy, and the way the copy would appear.

[Presentation continues.]

Mr. SCHWAB. Now this is what the result of an attempt to copy would be. The signal is incomplete and is regularly interrupted during the course of the program. Each time the interruption occurs, it lasts about 15 to 20 seconds, and it will occur approximately every 30 seconds or so throughout the length of the program.

[Presentation continues.]

Mr. SCHWAB. The recording VCR picks up the signals that are randomly encoded throughout the original protected copyrighted material.

The CHAIRMAN. All right.

Mr. FIFIELD. We think that this kind of bilateral system would significantly reduce illegal copying, and help enforce existing copyright laws.

The CHAIRMAN. Now was that the device, or similar device to what Mr. Valenti recommended?

Mr. FIFIELD. Yes; this is one example, and Mr. Ryan, the next witness you will hear testify will also talk about a similar system.

We have had some discussions with VCR manufacturers about this system. They have raised three reservations about a proposed bilateral anticopying system and I want to treat each of them in turn. The first has been that a system like this just does not exist.

As you saw during the demonstration, a bilateral system has been developed and that such a system can effectively reduce violations of our copyright laws.

The second issue that has come up when we have talked to VCR manufacturers has been the cost; that it will be too expensive to employ. This also isn't true.

We think that the addition of this kind of circuitry in a VCR would amount to pennies per unit. Considering the fact that the average cost of a VCR today is about $425, I think it is a small price to pay to help enforce our copyright laws.

The third reservation raised by some VCR manufacturers is that they can't adopt an anticopying system without all manufacturers

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being required to do so; otherwise they would be at a competitive disadvantage.

You are not going to get voluntary compliance to such a thing as a circuitry device that would eliminate back-to-back copying. In order for the VCR manufacturers to employ such a device it will require new legislation. That is really the summary of what I would like to leave you with, sir.

The CHAIRMAN. All right. Mr. Ryan.

STATEMENT OF JOHN RYAN

Mr. RYAN. Mr. Chairman, and members of the committee, my name is John Ryan. I am president of Macrovision, a California-based company whose sole business has been the development of copy-protection technologies for motion picture video and special interest video producers.

Macrovision was founded in the Silicon Valley in March 1983 by Mr. Victor Farrow, a California businessman and entrepreneur and myself.

At about that time the *Betamax* case was making headlines. It occurred to us that a unilateral anticopying system for video cassettes and other video media was badly needed.

A unilateral system is one which does not require any cooperation on the part of VCR manufacturers and must work within the framework of existing machines.

So we devoted our resources to the problem, and in October 1983, we discovered what we were looking for, a chink in the VCR's armor. It took a further 18 months and in excess of one-half million dollars to complete development and testing, and secure United States and international patent protection of a unilateral system for inhibiting copying of video cassettes and video discs.

The result, now known as the Macrovision process, is the only anticopying system to protect video cassettes and video discs in use today, and we are pleased to count among our customers such industry leaders as MCA/Universal, CBS/Fox, MGM/UA, Disney, Cannon/Home Box Office, Warner Bros., and we are concluding negotiations with Vestron and Media Home Entertainment.

The process is rapidly becoming an industry standard. We expect that within a few months 70 to 80 percent of new cassettes being made will be protected by the Macrovision process.

The Macrovision process is a unilateral anticopying process, that is, one which must operate within the framework of all existing VCR's and TV sets.

The video signal recorded on the videotape is encoded in a special way so that it will play correctly on the myriad VCR-TV set combinations in the marketplace, and yet, ensure that illegal copies exhibit highly degraded pictures having little, or no entertainment value.

The difficulties in designing a unilateral system are formidable. There are already some 30 million VCR's and 180 million TV sets in U.S. homes representing thousands of different models, and there is strong evidence that the VCR manufacturers have tried to make their products immune to every conceivable anticopying technology.

Nevertheless, the Macrovision process has an effectiveness of about 75 percent in preventing back-to-back copying of prerecorded cassettes.

By that, I mean that some 75 percent of such copies would be rejected as unwatchable by most viewers. This has real value for copyright owners as evidenced by the growing list of Macrovision customers. However, as I talk, there are forces at work which could soon render the process useless, if unchecked.

At least two electronics companies have announced plans to market black boxes designed to defeat the Macrovision process. There already exists a device bearing the logo of one of the largest VCR manufacturers, which, among other things, was designed to remove the Macrovision code from a video signal.

This is a fast-selling item in some very specialized markets where our process is being used to fight a piracy problem of staggering proportions.

Our company will do everything in its power to protect the copyright of our customers and the investment they have made in our technology. We have filed patent applications to cover all the ways we can think of to defeat our process, and we will fight the black box manufacturers in the patent arena. We will continue to improve and strengthen the process. We will seek to develop new anticopying processes, but we will be fighting a losing battle.

Whether the battle lasts 2 years or 5 years, sooner or later, it will be business as usual for the video thieves. There is, however, a simple, reliable, and most effective alternative; namely, a bilateral anticopying system.

In such a system, a special circuit in each VCR would sense the presence of some anticopying code on the video signal and temporarily disable the VCR's recording mechanism.

A viable bilateral system requires that every VCR manufacturer must include this special circuit in each VCR produced and that no black boxes be sold to defeat the system.

In the real world, this can only be achieved through legislation. We believe that the prerequisites of a good bilateral system are as follows: First, that the new VCR's have all the performance features and capabilities that the customer is accustomed to, including the ability to make back-to-back copies of nonprotected and home-produced video cassettes.

The only missing feature would be the ability to copy protected material. Second, that the cost of adding this chip or circuit to the new VCR has been negligible, much less than $1 per VCR, so that price increases are not necessary. And finally, that the cost to the copyright owner of coding the video signal be insignificant, again, so that the consumer does not have to pay for it.

If a system having these features were implemented, I believe the result would be an eventual reduction in software prices, and an increase in software quality and diversity.

This would be particularly true in the burgeoning and highly competitive nontheatrical video market. In the environment of a bilateral anticopying system, the only losers would be the video thieves.

It may surprise the committee to be told that the development of a bilateral system meeting the aforementioned criteria is a

straightforward technical task, which, from concept to implementation should take no more than 3 months.

There are various possible technical solutions. Today, I will demonsrate two approaches, using the existing Macrovision coding system.

The first would require a minimal level of cooperation from the VCR manufacturers, at most a change of one or two components in the VCR. The result would be severely distorted pictures in 100 percent of the illegal copies.

The second approach requires the addition of a very inexpensive circuit to each VCR at a cost of perhaps 20 cents per machine. The resulting illegal copies would have neither picture nor sound. These two approaches would have the advantage of being compatible with all existing and future Macrovision-encoded cassettes. I would like to direct your attention to the TV set for a very brief visual demonstration.

[Film demonstration.]

Mr. RYAN. This is an example of a back-to-back copy made from an unprotected cassette. Note that both picture and sound are of acceptable quality.

Now we see an example of how the existing Macrovision process, the unilateral process, distorts the picture to the point of having no entertainment value.

This is the process in use today, which has an effectiveness of about 75 percent. Again, we are looking at an illegal copy of a nonprotected cassette.

Now assuming that the VCR manufacturers agree to make minor changes to their new machines, roughly equivalent to turning a screw, the process, as it is currently applied would become 100-percent effective, and the result would be consistently inferior pictures interrupted with noise. The sound, however would still be acceptable.

And in the final case, by adding a small circuit to each VCR, the manufacturers could implement a true bilateral system, again working on the existing Macrovision encoding process. Now both sound and video are missing from the copy.

[End of film presentation.]

Mr. RYAN. However, I believe that we should add one more criterion to the three already suggested for an ideal bilateral system, and that is that the system be as difficult as possible to defeat.

Even if we can legislate against the sale of devices to defeat such systems, it is fair to assume that a black market will be generated for such items.

To the extent that this black market can be limited, it should be. All systems you will see demonstrated today can be defeated by devices costing a few hundred dollars, more or less.

Macrovision now has a bilateral system under development which could only be defeated by devices costing several thousand dollars, and which has all the previously established desirable characteristics of a bilateral system.

We expect to be able to demonstrate it early next year and would be pleased to expose it to technical criticism and suggestions at that time.

I hope that I have convinced this committee that a technical solution to illegal back-to-back copying is feasible at what need be no cost to the consumer, and which could be implemented almost immediately.

Thank you.

[The statement follows:]

ALTERNATIVES FOR PREVENTING
BACK - BACK COPYING OF
VIDEO CASSETTES AND VIDEO DISCS

TESTIMONY OF

JOHN O. RYAN

PRESIDENT OF MACROVISION
AND INVENTOR OF THE
MACROVISON ANTI-COPYING PROCESS

Mr. Chairman, and Members of the Committee:

My name is John Ryan.

I am President of Macrovision, a California-based company whose sole business has been the development of copy-protection technologies for motion picture video and special interest video producers. Our Chairman, Mr. A. Victor Farrow and our Chief Operating Officer, Mr. Gary J. Gwizdala are in attendance today.

Macrovision was founded in the Silicon Valley in March, 1983 by Mr. Victor Farrow, a California businessman and entrepeneur and myself. For the previous eighteen (18) years, I have been engaged in video technology research and development with various European and American companies and have been granted eighteen (18) patents for various inventions in the video field. Just before founding Macrovision, I was Head of Engineering and responsible for research and design for a division of Ampex Corporation, the company which invented videotape recording. Early in 1983, Mr. Farrow convinced me to combine our skills in a new venture, so in March, 1983, I left Ampex and in the time-honored traditions of Silicon Valley, Macrovision was launched.

At about the same time tne Betamax case was making headlines it occurred to us that a unilateral anti-copying system for video cassettes and other video media was badly needed. I had serious doubts that such a product was technically feasible as I was aware that much time and money had been invested in this field by others including major research universities,

without visible results. Nevertheless, we devoted our resources to the problem and in October, 1983, we discovered what we were looking for -- a possible chink in the VCR's armor. It took a further eighteen (18) months and in excess of one half million dollars to complete development and testing and secure U.S. and International patent protection of a unilateral system for inhibiting copying of video cassettes and video discs.

The result, now known as the Macrovision Process, is the only anti-copying system to protect video cassettes and video discs in use today. We are pleased to count among our customers such industry leaders as MCA/Universal, CBS/FOX, MGM/UA, Disney, Cannon/HBO Warner Brothers and are concluding negotiations with Vestron and Media Home Entertainment. The Process is rapidly becoming an industry standard. We expect that within a few months 70-80% of new cassettes being made will be protected by Macrovision. Currently, all the major duplicating facilities are equipped with Macrovision encoders. Several European duplicating facilities are also equipped and will begin applying the Process for their customers in early October. The high level of interest shown by both domestic and foreign copyright owners is strong testimony for the pervasiveness and seriousness of this form of piracy.

The Macrovision Process is a unilateral anti-copying process that is one which must operate within the framework of all existing VCR's and TV sets. The video signal recorded on the videotape is coded in a special way so that it will play correctly on the myriad of VCR/TV set combinations in the marketplace, and yet ensure that illegal copies exhibit highly degraded pictures having little or no entertainment value. The difficulties in designing a unilateral system are formidable. There are already some 30 million VCR's and 180 million TV sets in U.S. homes representing thousands of different models and there is strong evidence that the VCR manufacturers have tried

to make their products immune to every conceivable anti-copying technology.

Nonetheless, the Macrovision Process has an effectiveness of about 75% in preventing back-to-back copying of prerecorded video cassettes. By that, I mean that 75% of such copies would be rejected as unwatchable by most viewers. This has real value for copyright owners as evidenced by the growing list of Macrovision customers.

However, as I talk, there are forces at work which could soon render the Process useless if unchecked. At least two electronics companies have announced plans to market "black boxes" designed to defeat the Macrovision Process. There already exists a device, bearing the logo of one of the largest VCR manufacturers, which among other things, was designed to remove the Macrovision code from a video signal. This is a fast-selling item in some very specialized markets where our Process is being used to fight a piracy problem of staggering proportions.

Our company will do everything in its power to protect the copyrights of our customers and the investment they have made in our technology. We have filed Patent applications to cover all of the ways we can think of to defeat our Process and we will fight the black box manufacturers in the patent arena. We will continue to improve and strengthen the Process. We will seek to develop new anti-copying processes. But, we will be fighting a losing battle. Whether the battle lasts two years or five years - sooner or later it will be business as usual for the pirates.

Viable unilateral anti-copying processes are extremely difficult to design, as evidenced by the fact that, despite the crying need for them in the marketplace, the Macrovision Process has no competition. It may well be the case that the Macrovision Process is exploiting the

last chink in the VCR's armor. There is, however, a simple, reliable and most effective alternative available - namely a bilateral anti-copying system. In such a system, a special circuit or "chip" in each VCR would sense the presence of an anti-copying code on the video signal and temporarily disable the VCR's recording mechanism. A viable bilateral system requires that every VCR manufacturer must include this special chip in each VCR produced and that no black boxes be sold to defeat the system. In the real world, this can only be achieved through legislation.

The prerequisites of a good bilateral system are as follows:

1) That the new VCR's have all the performance, features and capabilities that the consumer is accustomed to, including the ability to make back to back copies of non-protected and home produced video cassettes. The only missing feature would be the ability to copy protected material.

2) That the cost of adding this chip to the new VCR's be negligible - much less than $1.00 per VCR so that price increases are not necessary.

3) That the cost to the copyright owner of coding the video signal be insignificant - again so that the consumer does not have to pay for it.

If a system having these features were implemented, I believe the result would be an eventual reduction in software prices, and an increase in software quality and diversity. This would be particularly true in the burgeoning and highly competitive non-theatrical video market. In the environment of a bilateral anti-copying system, the only losers would be the video thieves.

It may surprise the Committee to be told that the development of a bilateral system meeting the aforementioned criteria is a straight-forward technical task which from concept to implementation should take no more than three months! There are various possible technical solutions. Today, I will demonstrate two approaches using the existing Macrovision encoding system.

The first requires a minimal level of cooperation from the VCR manufacturers - at most a change of one or two components in the VCR. The result would be severely distorted pictures in 100% of the illegal copies.

The second approach requires the addition of a very inexpensive circuit to each VCR at a cost of no more than 20 cents ($.20) per VCR. The resulting illegal copies would have neither picture or sound.

These two approaches would have the advantage of being compatible with all existing and future Macrovision-encoded cassettes. I now direct your attention to the T.V. set for a brief visual demonstration.

However, I believe that we should add another criterion to the three already suggested for an ideal bilateral system. That is that the system be as difficult as possible to defeat. Even if we can legislate against the sale of devices to defeat the system, it is fair to assume that a black market will be generated for such items.

To the extent that this black market can be limited, it should be. All systems you will see demonstrated today can be defeated by devices costing two hundred dollars more or less.

Macrovision now has a bilateral system under development which could only be defeated by devices costing several thousand dollars, and which has all the previously established desirable characteristics. We expect to be able to demonstrate it early next year and would be pleased to expose it to technical criticism and suggestions at that time.

I hope that I have convinced this committee that a technical solution to illegal back-to-back copying is feasible at what need be no cost to the consumer, and which could be implemented almost immediately.

Thank you.

Senator DENTON [presiding]. Gentlemen, I have a few questions here for both of you. I will address the first to Mr. Fifield.

If Congress were to adopt legislation that would prohibit the manufacture of equipment that can defeat anticopying technology such as the Macrovision process, would there be any need to require that all video cassette recorders and prerecorded tapes be encoded?

Mr. FIFIELD. I think Mr. Ryan's testimony was that the only way to effectively assure a 100-percent anticopying would be to have a bilateral system. His system, as exists today is a unilateral system, where the signal is only encoded on the tape, and is about 75 percent effective. But as he also testified, there are many people who are busily working, and now advertising in video publications about equipment and ways to defeat the Macrovision system.

So long term, if we really want to protect the copyright on prerecorded cassettes, we do need all the VCR machines, at some certain point in the future, to be required to have the circuitry, and then those people who are marketing copyright material would also encode their tapes.

We would then have assurance that our copyright laws are being upheld. That is why we are asking for legislation requiring VCR manufacturers to put circuitry into their machines.

Senator DENTON. If a video cassette recorder is encoded, would this in any way prevent a person from recording off of commercial television, or making his own home videos?

Mr. FIFIELD. No. It would not. The system can be set up so that it would only defeat copying of copyright material that was also encoded. So, time shifting, recording off air, making your own copies of your own home movies of birthdays, celebrations, whatever, like that, would not be affected at all by a VCR machine that would have the circuitry in it.

Senator DENTON. Mr. Ryan, in your testimony, you stated that the Macrovision process is only 75 percent effective. Would you explain why this is so.

Mr. RYAN. It is so because the Macrovision process, as currently applied, is a unilateral process. It was designed to work on all the existing VCR's in the marketplace.

The key is to devise some way to modify the video signal on the cassette such that it plays perfectly normally on all existing combinations of TV and VCR in the market, but that it will cause as many as possible, VCR's, to produce a bad copy.

No cooperation is given from the VCR manufacturer in the unilateral system, so one has to devise something that will somehow differentiate between a television set and a VCR.

It is probably impossible to develop a 100-percent effective unilateral system, but as I stated in my earlier testimony, with minimal cooperation from the VCR manufacturers the existing unilateral Macrovision process could be made 100-percent effective.

Senator DENTON. If the Macrovision process is applied to a prerecorded videocassette, does it in any way affect the viewing quality of the tape, or the performance of the video cassette recorder?

Mr. RYAN. Various customers of Macrovision have indicated to us that the level of problems they have experienced is of the order of one-hundredth of 1 percent. The process is an evolutionary

thing, and it is only in the last 3 of 4 months that it has seen extensive usage.

It is natural to expect a few problems at this stage but they are very, very minor. In fact the total number of returned cassettes has not noticeably increased. Existing cassettes without Macrovision have faults associated with them, sometimes bad video, creased tapes, and so forth, and that represents a return rate of the order of a quarter of 1 percent. That has barely changed since the Macrovision process was introduced.

Senator DENTON. Is the only purpose of so-called black box technology to defeat anticopying technology?

Mr. RYAN. Well, the black boxes we are referring to here are devices designed perhaps to do many things, but they would include within them the special circuit designed to defeat the anticopying scheme.

They may have other purposes.

Some black boxes have no other purpose than to defeat the anticopying process. Others do have legitimate uses such as video enhancement and color correction features but the specific circuit built into these black boxes to defeat the anticopying process has no other value or purpose.

Senator DENTON. There will be, I am sure, questions in writing from other members of the committee, and I will ask you to respond to them as promptly as you can. The questions I just asked were asked in deference to the desires of the chairman, and I will now thank you for your testimony, and call on the final member on the witness list, Mr. Charles D. Ferris, Home Recording Rights Coalition, Washington, DC. Thank you, gentlemen.

I would remind you, if I may, Mr. Ferris, the chairman has asked that we limit the orally delivered remarks to 5 minutes, without prejudice to the record, including everything you have presented in writing.

STATEMENT OF CHARLES FERRIS, HOME RECORDING RIGHTS COALITION, WASHINGTON, DC

Mr. FERRIS. Thank you, Mr. Chairman.

My name is Charles Ferris. I am an attorney, here in Washington and I represent the Home Recording Rights Coalition.

Our coalition was formed in October 1981, immediately after the decision in the court of appeals in the so-called *Betamax* case.

Included in our group, Mr. Chairman, are companies like Sears, Roebuck, J.C. Penney, Tandy Corp., General Electric, RCA, Matsushita Electric Corp. of America, Sony Corp. of America; trade associations such as the Electronic Industries Association, the National Retail Merchants Association, and the American Retail Federation. Thousands of individual consumers and consumer groups operated out of the Home Recording Rights Coalition.

Mr. Chairman, shortly after the introduction into the marketplace of the VCR, the effort was made by the Hollywood film producers to ban the VCR.

Then, after the Supreme Court decided against this tactic the Hollywood film producers attempted to tax it, but that tactic was not successful either as Congress refused to enact such legislation.

Now, today, they come back to lay the seed to redesign the VCR. All these proposals have the same faulty premise: that the VCR is a threat to the revenue streams of the Hollywood studios rather than the instrument through which their most significant revenues are realized. Let me repeat that, Mr. Chairman. Video cassettes provide the largest revenue stream to the Hollywood studios. About $1.8 billion annually, exceeding the revenues of theatrical exhibitions.

There is a sense of deja vu here today, Mr. Chairman. It is a flashback to the hearings 4 years ago before this committee, and its counterpart in the House. The VCR was described then as a pernicious product that stole Hollywood's creativity.

Mr. Valenti, this morning, in his excellent presentation, as always, talked about how taping is wrong, wrong, wrong. I understand the enthusiasm of Mr. Valenti, for his premise is that any form of taping of the creativity of a movie is wrong.

The only problem is, the Supreme Court has decided otherwise. They said that you can tape a movie off the airwaves and it is not wrong; they heard Mr. Valenti's arguments 4 years ago, but they decided that it is not illegal, and it is not harmful to the premises of copyright protection.

Four years ago, the testimony of Mr. Valenti, and the others who represented the Hollywood community, told the horror story of millions and millions of home tapes from television that would destroy not only the producers of the programming for TV, but the television market itself. Time shifting, by their argument, was an uptown term for theft of their product. Their legal authorities argued, then, that it was illegal under the Copyright Act, citing, I might say, the same cases and the same rationales that they cite today in their testimony.

The only omission, as I say, is they failed to remember that the Supreme Court ruled that they were wrong 4 years ago, and they are wrong today.

Not only does the Hollywood community persist in its efforts, but now it seeks to redesign the circuitry of the VCR, to incapacitate the VCR from a phenomenon of unsubstantiated dimension, back-to-back VCR home taping.

Time shifting from television was real. It was said, then, by Mr. Valenti, to be illegal, and he has repeated, as I said, that same theme today.

But let us remember, Mr. Chairman, that VCR's were purchased to a great extent to provide this convenience of time shifting to the consumer. But after their purchase, and when the VCR was in the home, it provided the great opportunity for playback, not only of time-shifted materials from television or cable, but of purchased or rented prerecorded cassettes.

That incidental use has generated the $5 billion annual software market, which now provides these Hollywood studios with their most significant revenue stream.

This has been a new revenue stream, in addition to the box office, which, as our chart shows, over here to the left, has remained very healthy. As a matter of fact, in the period of time since 1981 through today, when this enormous video cassette

market has grown, home theatrical revenues have increased by an order of magnitude of, I believe, 35 to 40 percent.

So it has not diminished the home theater market. That market is healthier than it was 4 years ago, but we have this new revenue stream that has provided tremendous profits to the Hollywood studios, which they justly deserve.

But let me accept Mr. Valenti's premise, that people hook up two VCR's to make a copy of a rented cassette. In his prepared testimony which I read this morning, he talks about the New Yorker who rents 5 movies and returns 14 hours later saying, "I can watch them later because I've copied them all."

Setting aside the fact that that phenomenon has a ring of time shifting to it, even though it is not from television but it is from a rented prerecorded cassette, what economic sense does it make? Or more relevant, what economic harm to the Hollywood studios has occurred, when I can rent a movie, or when that New Yorker was able to rent a movie for $1 per movie per day, and it is cheaper in some places. Why does it make economic sense to spend $6 to $8 to tape it for your own collection? The rental charge, plus the blank tape charge. If it is being done, it is at best whimsical: I want to have a copy of my own. How many times do you watch a movie? But in no way does that activity cause any economic harm to the Hollywood producer.

That very fact, that someone rents the movie, is an economic benefit, and contributes to the annual $5 billion market in video cassettes.

So today's request to consider the legislative mandate of inserting a chip in all VCR circuitry to prevent this phenomenon should be rejected.

And I might say that this chip that is talked about this morning, the chip that will only prevent back-to-back VCR copying, has an interesting dimension that has not been discussed, Mr. Chairman, thus far.

This chip will have no effect at all upon the 40 million VCR's that are a part of the present population of VCR's in this country. So it will have no impact whatsoever on the present.

It will have some impact in the distant future, when the actuary tables for VCR's catch up with the VCR's and throw them into the trash heap. Then the population of VCR's will all have this chip.

This recommendation amounts to the insertion of little time bombs into VCR's, which will have no impact today, but will in the future. And I think it is the future in which this Hollywood-producing community is interested.

Because if these VCR's are required to have this chip inserted into them the future of home taping is doomed. For as Mr. Valenti said in answer to the chairman's question earlier today, he has no design at all upon commercial television or time shifting on television at this time. But in the future, if all these disabling chips have been inserted in all VCR's, the Hollywood community, the producing community, can turn the encoding switch, and the software that will be provided to commercial television, to cable, as well as to the video cassettes, will all be encoded and the effect will be to undermine the victory that the consumers had in the *Betamax* case

because then, they will not be able to tape from television, for their convenience, a picture or a program and watch it at a later time.

This is not an innocuous proposal that has no impact, that costs an insignificant amount of money, another contention that I have challenged in my prepared testimony. This is a pernicious proposal which I think is the ultimate in legislative engineering and it should be on the basis of the evidence before this committee, summarily rejected at this time. A case has not been made that there is actually any economic harm that needs to be addressed with a remedy that includes interference with the capacity of the home taper to tape for his own personal use.

I will be glad to answer any questions, Mr. Chairman, that you might have with respect to my prepared testimony, or to any of the additional observations I made this morning.

Senator DENTON. Thank you, Mr. Ferris. For the record, all of the witnesses' prepared statements will be included as part of our record, in case that has not been stated before.

Mr. Ferris, does your concern extend to fearing that if Congress prohibits the back-to-back copying of prerecorded tapes, this could be a step in the direction of preventing all home taping?

Mr. FERRIS. Absolutely. If you require, Mr. Chairman, the insertion of any chip, as they call it, into the circuitry, or any incapacity to tape an encoded piece of software—and they were talking about the bilateral mechanism where you trigger this chip through the software—therefore, you incapacitate the VCR from copying. It is proposed to be used in the context of VCR to VCR, which makes no economic sense to make tapes in that context, but, once that chip is there, all you have to do is have that subliminal signal in the software, wherever it emanates, whether it is on commercial television, whether it is on cable, whether it is on subscription TV, or whether it is on a prerecorded cassette, and that same chip is triggered, and the incapacity to tape is present and overwhelming.

That is really what is the design, and the capacity of this chip. It makes no sense whatsoever to require insertion of a chip to prevent VCR to VCR taping, because that is a phenomenon that makes no economic sense, and does not even exist. Who would buy two VCR's for the purpose of going to the trouble of making a tape, when you can rent it for a dollar any time you want to watch the movie?

Senator DENTON. If a copyright owner goes to the trouble of encoding the tape, to prevent copying of his video tape, do you believe it should be illegal to manufacture equipment for the express purpose of making that anticopying effort ineffective?

Mr. FERRIS. If a manufacturer of a VCR does this in some way——

Senator DENTON. A copyright owner seeks to prevent copying of his video cassette by encoding the tape, do you believe that it should be illegal to manufacture equipment for the express purpose of making that anticopying protection ineffective?

And I am glad to see the chairman back, and I welcome my friend and colleague, and much-admired friend, Senator Thurmond back, and I yield the gavel.

The CHAIRMAN. No; you go right ahead. You are doing fine.

Mr. FERRIS. Well, I do not see the real focus of the question from the standpoint, Mr. Chairman, of whether, if I purchase a particular video cassette and choose to use that in any particular way, I think I have the right under the copyright law to be able to make a copy of a tape which I purchased for my own personal use. As long as there is not a commercial gain involved, or a commercial transaction, or a commercial use of that use of that video cassette which I purchased. The copyright law provides me with rights when I purchase the copyrighted work—I think I have that right.

And so I do not quite understand or the context of the use of the black box——

Senator DENTON. I am advised that the context of the question gets at whether or not it would be OK to try to decode the anti-copying protection that a copyright owner sought to inject by encoding the tape.

Mr. FERRIS. Well, I think if the system is the unilateral system like the Macrovision which has been described here today, Mr. Chairman—if the software manufacturer desires to put that type of encoding in, I think that is their prerogative to do that.

I do not think it makes any economic sense to do it from the standpoint of motion pictures, especially if it degrades at all the quality of the primary work from the standpoint of its use to the purchaser or the viewer.

But if they adopt it, and that is their judgment, even though I do not think it makes any economic sense to do so, but if they do it, I think that that is their prerogative, and they should have that right.

The CHAIRMAN. Mr. Ferris——

Mr. FERRIS. Yes, Mr. Chairman.

The CHAIRMAN [continuing]. Just how apart are you and Mr. Valenti? You both appear very sincere and conscientious in what you are presenting, and there ought to be some way that reasonable men can get together.

Of course there would have to be a decision made by the Congress, but I just wondered if there is any chance there, that the two of you can get together in your positions.

Now Mr. Valenti, do you want to come back up here and talk a little bit? He will not object to you being at the same table, I do not think.

Mr. FERRIS. Oh, no. I have great respect for Mr. Valenti.

The CHAIRMAN. Well, Mr. Valenti is a very fine man, a very smart man, and you are, too. Now why cannot you gentlemen reconcile your differences in some way that would be fair to your clients and fair to the public?

Mr. FERRIS. Well, Mr. Chairman, may I just start by saying that——

The CHAIRMAN. Now tell him what you are willing to do and let's hear what he says.

Mr. FERRIS. That is right. From the very beginning, when the *Sony/Betamax* case was first brought, the VCR was perceived as a threat by the Hollywood community, and there was an attempt to ban it. Mr. Valenti in effect came to me and put a pistol at my head, and said we find this a threat and we are going to have to eliminate this thing.

Fortunately, the Supreme Court intervened and said, no, you cannot do that, Mr. Valenti. And then, after that case was decided, Mr. Valenti came up here and very eloquently sought an enormous tax on every VCR and every tape.

He took that pistol away from my head and put it on my left kneecap and wanted to shoot me there. The Congress said, no, Mr. Valenti, there is no justification for that.

Today he is up here and he has got the pistol at my right kneecap because he wants to incapacitate VCR's. If it is always going to be a question of just what part of me is going to be shot, I cannot be very reasonable, Mr. Chairman.

I ask this committee to ask the more basic question: Is it necessary to shoot me? I think that is what we should talk about—what is the harm involved here, not what is the remedy.

Mr. Valenti wants a remedy and does not discuss whether there is any justification for it at all. We can sit and talk, if he is willing to——

The CHAIRMAN. Well, he wants to protect his clients.

Mr. FERRIS. And we have been——

The CHAIRMAN. Now how do you think they ought to be protected?

Mr. FERRIS. I think they should and I think they are protected, under the existing copyright laws, Mr. Chairman.

The CHAIRMAN. Do you think the present copyright law protects them sufficiently?

Mr. FERRIS. Oh, absolutely. Absolutely. If Mr. Valenti got his way 4 years ago before the Supreme Court acted, and in his brief before the Supreme Court, you would not have the $5 billion revenue stream from the video cassette market. That market is a $5 billion annual market, Mr. Chairman, and Mr. Valenti's clients get $1.8 billion a year from that video cassette market, their largest revenue stream of all. Exceeds all others. Exceeds theatrical exhibition.

The VCR is a tremendous opportunity. As I said 4 years ago to this committee, and Mr. Valenti contested it then—but he has agreed today—the VCR is the best friend that his clients have.

I must say he brings new meaning to "with friends like these." But I ask: Where is the harm? I think an awful lot of this effort, Mr. Chairman, stems from the notion that the VCR was the first distribution mechanism that did not go through a licensing mechanism by the Hollywood community to control the viewing and the exhibition.

And historically they always have been able to license each viewing. The theaters. They always licensed theaters. They always licensed television. They always licensed cable. They always licensed television in syndication. They always licensed in foreign markets. The VCR came along and viewing took place without licensing. It was a change, a significant change, and a change that the community has had great difficulty adapting to and adjusting to, and certainly assimilating.

But that, I think, is really where their tremendous institutional discomfort comes from the VCR. But the VCR is a marvelous contraption which provides marvelous results, and marvelous profits

to the Hollywood studios, and they deserve it, because they did create these products.

But it is not the pernicious product that the testimony that has been before this committee for 4 or 5 years has alleged.

The harm is not there, and before you have a remedy, Mr. Chairman, I hope you quantify and agree as to what the real harm is. And I would like Mr. Valenti to address that question: What is the harm? What is the overall harm of the VCR?

That record has not been made, because there is none. There is only benefit.

The CHAIRMAN. Well, maybe Mr. Valenti wants to respond to you.

Mr. VALENTI. Well, Charlie's remarks took longer than the French Revolution of 1848, and so I want to suggest to him about pistols and shooting people's kneecaps, he is in the wrong venue, Mr. Chairman. He ought to be in New York where they have the Mafia on trial. I think your comments would be better tendered there, Charlie. What Mr. Ferris does is plaster together the true and the false, and therefrom manufacture the plausible.

That is a big problem. First, the Supreme Court decided one thing and one thing only, Mr. Chairman. We always forget that.

It merely said that over-the-air taping was fair use. It never spoke to any other subject about home taping, not one word.

All we are talking about now, and I would like to bring it down to Earth, is whether or not it is right—forget about harm—whether it is right for someone to copy an entire movie, a full-length movie.

I put it to you, Mr. Chairman, is what would happen if people had the right to copy books, full-length books from the library?

The CHAIRMAN. Now are you speaking about copying just for their own use, or to be distributed?

Mr. VALENTI. Well, Mr. Chairman, what Mr. Ferris did not tell you but what A.C. Neilsen has developed—these are not my numbers. This is not my figures. This is A.C. Neilsen.

They say, said Neilsen, that 4 million homes had multiple VCR's, and that they had people tell them they had in their possession, or had copied for their friends, over 70 million copies of full-length movies. Which means that when you hook two VCR's together, it might not be your own; it might be the neighbors, as Neilsen found out.

And you might rent two movies, and he rents two movies. And so you copy them together, so you have two free rentals, and he has two free rentals.

What Mr. Ferris also did not tell you is that the Video Dealers of America, the VSDA, have presented a letter to this committee in which they support this kind of legislation. Because they realize that when you have 60 to 65, or 70 million VCR's—not 30, what you have today—this kind of back-to-back taping can be deadly to their business, and there are some 20,000 small video stores in America, all of whom worry about the possibility of this, I say, illegal copying.

But forget illegal. If it was not illegal, it ought to be, because it goes right at the heart and core of——

The CHAIRMAN. And Mr. Valenti, do you object to them just taping it in the home and using it there?

Mr. VALENTI. I have no objection to somebody taping it in their home, Mr. Chairman, but what we do not know is if that is all they do. There is great evidence compiled by A.C. Neilsen to show that there is a lot more that is going on, a lot of taping, and that has a problem——

The CHAIRMAN. You would object to that being used and for commercial purposes, as I understand?

Mr. VALENTI. Well, what is commercial, Mr. Chairman. For example, if I tape two——

The CHAIRMAN. Suppose they taped in the home for their own use, suppose somebody else taped in their home for their own use. What is the difference if one man taped two of them and he kept one and gave one to a neighbor?

Mr. VALENTI. Well, because the one he gave to——

The CHAIRMAN. The neighbor could have taped it anyway, could he not?

Mr. VALENTI. Excuse me, sir. The one he gave to the neighbor represents a lost rental to the video store in that neighborhood.

He is taking a cassette he rented. He tapes it, gives one to his neighbor——

The CHAIRMAN. Well, the neighbor could have taped it to start with, could he not?

Mr. VALENTI. Well, if he gives one to the neighbor, the neighbor does not have to tape it because he now has it to see.

The CHAIRMAN. Well, I say he could have taped it to start with, just like the first person tapes it.

Mr. VALENTI. Yes, sir, and then they could trade. That is correct.

The CHAIRMAN. In other words, what is the difference in one man taping it, or taping two, giving one to a neighbor, or, if two neighbors and they both tape it? What is the difference there? There are two tapes involved.

Mr. VALENTI. Lost rental to the video store, Mr. Chairman. I just said, if I take "The Sound Of Music" and I tape it, and then give it to my neighbor, he does not have to rent it. The video store has lost a sale.

The CHAIRMAN. But the neighbor could have taped it to start with, could he not?

Mr. VALENTI. Yes, sir. That is right. That is correct.

The CHAIRMAN. Well, then, what is the difference——

Mr. VALENTI. But if the neighbor has not rented it, then that is the problem. The problem, Mr. Chairman—let me simplify it if I can.

The problem is simply this: when you can tape a——

The CHAIRMAN. I can understand to take and use for commercial purposes, I can understand that you would object to that.

But if you have got two people here, that live side by side, and one of them tapes it for his own use and the other neighbor could have taped it if he wanted to—what is the difference if the first neighbor taped two of them, he kept one and gave one to his neighbor?

Mr. VALENTI. Well, I am just saying, Mr. Chairman, then the neighbor would not have to rent it from the video store. He would not have to rent it.

The CHAIRMAN. But he could have taped it to start with, just like the first man did.

Mr. VALENTI. Well, perhaps he could. I am assuming that one tape has been rented from a store. I rent it, and I tape it, and I give a copy to Mr. Ferris.

Now he does not have to rent that from the store. That is where the lost rental comes in, Mr. Chairman.

The CHAIRMAN. Yes. I am just trying to look at it from a practical standpoint.

Mr. VALENTI. Well, I must say, Mr. Chairman, that is precisely the prism through which we are watching, is a practical standpoint. I would not be up here before you today——

The CHAIRMAN. I understand your position about not using it for commercial purposes, but if one neighbor can tape it, another neighbor can tape it. But if the second neighbor does not bother taping and the first neighbor gives him one, what is the difference if both of them could have taped it to start with?

Mr. VALENTI. Let me say that—nothing wrong with that. Now let me posit to you another situation, where I rent one tape and my neighbor does not rent it. And then I tape it, and I give it to him. That means that that neighbor does not go to the Potomac Video Store and rent that tape. He now has it free of charge. That is the problem, Mr. Chairman.

The CHAIRMAN. Well, if he had bought the tape to do it with just like the first neighbor. The first neighbor, he bought a tape and taped it. The second neighbor bought a tape and taped it.

Mr. VALENTI. Nothing wrong with that, Mr. Chairman. I am saying, though, the only proposition I was giving you—and I do not want to belabor this point is—I am making the assumption that a neighbor rents a tape, and I do not, and he copies it and gives it to me.

Then there is a lost rental that takes place. That is all.

The CHAIRMAN. Do you want to answer that?

Mr. FERRIS. I think it does not make any economic sense to do that. When you can rent it for a dollar, why do you spend $8 to make a copy of it?

Mr. VALENTI. I do not know whether Mr. Ferris is renting tapes—does anybody in here rent tapes for a dollar?

Mr. FERRIS. Yes. I do, at Erol's.

Mr. VALENTI. You do? It costs me $3 a night, or $2 a night to do a tape.

Mr. FERRIS. Well, you ought to come in from Potomac, Jack, and go to Erol's.

Mr. VALENTI. I see. I see. [Laughter.]

The CHAIRMAN. Let's get quiet. Let's get quiet. If he can rent them cheaper than you, you ought to find out where he rents them maybe.

Mr. VALENTI. I have a feeling—how many are you copying, Charlie? Tell us about that.

Mr. FERRIS. Well, as a matter of fact, let me tell you about that. I only have one VCR, so I do not have a neighbor that I get it from. But, last night, Mr. Chairman, I went and looked by my video cassettes, and my family has made about 60 videotapes of movies off

cable, and off television over the past 5 years. Sixty of them sitting there on the shelf.

And I went through them, and we have never looked at one of those a second time. They are there, and they are sitting there.

The only people that are making money are the blank tape manufacturers. We have every movie that has been on——

Mr. VALENTI. Charlie, they are your clients. Don't cry.

Mr. FERRIS. That is right. They are making money on it. But all I am saying is, Mr. Chairman, my family goes to Erol's, and they go in there and they bring home tapes for a weekend, three or four tapes at a time. And I have found tapes that they rent at Erol's on that shelf at home. They do not even know what is up there. They rent the tape that they have previously taped from cable.

When you go into a video store, it is one of the purest forms of impulse shopping. You go in and you look, and you say, gee, I think I would like to see "Dirty Harry." You pull it off the shelf and you bring it home. The fact that it is on your shelf, that you copied it 3 years ago from television, and it is sitting there, it does not register whatsoever.

So I am saying this notion of lost sales is a myth. The great fault of this premise is that every time a taping occurs, whether it is timeshifting from television, the argument that was made 4 years ago, this is a lost sale.

I think the economics of the industry have demonstrated in the past 4 years, that that notion is fallacious.

Mr. VALENTI. Let me tell you something, Mr. Chairman. Mr. Ferris is using figures that simply are not true.

First, the box office of theaters is going down. It was off 11 percent in admissions, 1985 over 1984. We are going to be off about 6 percent this year over 1985.

I do not say that VCR taping is the reason, or rentals is the reason for it because I do not know the reason for it yet.

But I just want to point out that the numbers that he is brandishing, he is doing it carelessly, and I think he is getting his numbers from somebody that does not know what they are.

My final point though is, if taping of movies is unimportant, meaning that nobody ever watches them, then why would any circuitry that would keep you from back-to-back copying be such a calamity? I will tell you this, Mr. Chairman. We are convinced, the video stores are convinced, and the producers of educational material, and of movies, are convinced, that there is an extraordinary amount of back-to-back copying, that will grow larger as the population of VCR's doubles over the next 5 years.

All we are suggesting to the Congress is this: the U.S. film and television industry is a great trade asset. We bring back to this country about $1 billion a year in surplus balance of trade.

We are one of the few industries that has a trade surplus with Japan, which is quite unusual these days. I am saying to you, that if you do not find some way to begin the stopping of back-to-back copying, you are at this time, I think, harming a trade asset in this country, because the people who are in the business—unlike Mr. Ferris who, with his clients, sees it from a different viewpoint—we believe this is a deadly virus and it is going to hurt us.

The video stores believe it also. The time has come to do a small bit of legislation, so that all video cassette manufacturers, and VCR's in the world, would all be operating under the same limitation.

And by the way, Eastman-Kodak is perfectly willing to have this circuitry put in their machines, so long as everybody else does it. That is all they ask, and that is why we have come to you. I could work out probably some cooperative 62 venture with one or two manufacturers, but you need them all, out of Taiwan and out of Korea, as well as Japan and the United States, and that is the problem, and that is why we were here.

The CHAIRMAN. Well, both of you have represented your clients well. Make them pay you well. We now stand adjourned.

Mr. FERRIS. Mr. Chairman, shall I insert in the record an article from the Washington Post—written by Kathryn Harris of the Los Angeles Times. It is from that article that I obtained the 38-percent increase in theatrical exhibition revenues over the past 5 years.

Mr. VALENTI. Not true, Charlie. I am sorry.

Mr. FERRIS. Well, all I am saying is my source is the Los Angeles Times. Thank you.

[The statement of Mr. Ferris and article from the Washington Post follow:]

STATEMENT OF CHARLES D. FERRIS
FOR THE
HOME RECORDING RIGHTS COALITION

Before The United States Senate
Committee on the Judiciary

10:30 a.m. Tuesday, September 23, 1986

Mr. Chairman and members of the Committee, my name is Charles D. Ferris. I am an attorney in Washington, D.C. with the firm of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. On behalf of the Home Recording Rights Coalition ("HRRC") I thank you for inviting me to testify today.

The HRRC was formed in October, 1981, immediately after the decision of the U.S. Court of Appeals for the Ninth Circuit in the so-called "Betamax" case. That court decision, later reversed by the U.S. Supreme Court,* was based on the flawed perception that the video recorder represented a threat, rather than a huge opportunity, for motion picture and other video programming producers. Our coalition was a response by a broadly based group of companies and people who knew and cared enough to set the record straight. Included in this group, then and now, were companies such as Sears, Roebuck & Co., J.C. Penney, Tandy Corp., General Electric, Pfizer, DuPont, Memtek Products, Maxell, RCA, TDK, Matsushita Electric Corp. of

* Sony Corp. v. Universal City Studios, Inc., 464 U.S. 491 (1984).

America, and Sony Corp. of America; trade associations such as the Electronic Industries Association, the National Retail Merchants Association, and the American Retail Federation; thousands of individual retailers and consumers; and consumer groups organized as the Consumer Recording Rights Committee.

Today, after almost 5 years, 36 million VCR's, 20,000 video software retailers, and a $5 billion market in prerecorded video software, we can say modestly that our basic point, that the VCR is friend, rather than foe, has been made and accepted. Yet, we are here today because the movie industry is now seeking broader "protection" against home taping than ever, and would again place in doubt the very right of home recording.

Our Coalition is very concerned. We see proposals to implant anti-taping chips in VCR's as "chipping away" at the Supreme Court's Betamax decision. We see new, incipient forms of "license," royalty tax, or outright prohibition. We seriously question the need to even think about such proposals. The VCR is a legal and beneficial product that has conferred a huge bounty on program producers. The costs, inconvenience, and danger to consumers from requiring anti-taping chips would be considerable and unwarranted.

The Video Recorder Has Been Immensely
Beneficial to Program Producer Interests

It is now obvious that those who sell VCR's do an immense favor to producers of program material.

Only four years ago, we worried about VCR's being outlawed entirely. We supported legislation that would guaranty the right to tape. The attack from movie producers was unrelenting. The Congress was told that once people had appreciable numbers of video recorders, no one would go to movie theaters, no one would watch TV commercials, advertisers would stop buying them, and no "aftermarket" for video products could develop.* We responded to these predictions with some of our own. Here are some excerpts from our testimony at a House Judiciary subcommittee field hearing in Los Angeles on April 13, 1982 (emphasis added):

> The VCR ... promises to break down the existing production bottleneck for creative talent seeking access to the television consumer. Indeed, it may be this aspect of the VCR's potential that most disturbs the major movie studios. For many years they have tightly controlled the flow of creative works to the nation's movie theaters and over the nation's airwaves. They may not similarly control the prerecorded video tape market. This technology offers a low cost, low risk means for new artists with new ideas to enter the programming market and compete head to head at the home viewing level with those who control the other avenues of program distribution. The breakdown of that programming bottleneck may the the VCR's greatest promise to the American public.

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* See Testimony of Jack Valenti, Hearings, Home Recording of Copyrighted Works, Subcommittee on Courts, Civil Liberties and the Administration of Justice, Committee on the Judiciary, 97th Congress, 2d Session, on H.R. 4783, H.R. 5488 and H.R. 5705, April 12-14, 1982, Ser. 97, Pt. I, p. 7.

> We also believe that allowing the public to use VCRs without the threat of copyright law violations and without artificial taxes or royalties will not hurt, but will, in fact, increase the economic rewards that copyright holders currently receive. Therefore, even on the reverse side of the scale -- the potential harm to the copyright holder -- VCRs are an asset, not a threat. Indeed, we believe that VCRs are one of the best friends Hollywood has ever had.
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> With hindsight, years later, everyone will understand what the furor was about, as it becomes clear with calmer reflection that the producing interests were again "crying wolf," as they did when they predicted that the advent of television would mean the end of movies, that television would spell the end of radio, or that cable television or over-the-air subscription television would destroy broadcast television.*

Within two years of this testimony, the Supreme Court confirmed what was already becoming apparent in the marketplace -- that the sellers of VCR's were not infringing on any rights of the sellers of program material. Without even touching on the uses of VCR's that are clearly beneficial to program producers, the Court said simply that, because VCR's have substantial noninfringing uses, their sellers cannot be held liable to copyright proprietors under any theory of "contributory infringement." The Court refused to impose any burdens on sellers of VCR's because the act of selling VCR's does not violate any right of program producers.

The movie studios responded that they would take their case to the Congress. But they did not receive a warm reception. It was already apparent that the VCR was making

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* Statement of Charles D. Ferris, Hearings, Id., pp. 164, 185.

money for Hollywood, and other program producers, hand over fist. Here are some of the ways in which this happened:

20,000 Video Dealers

Perhaps every retail shop in the country in which prerecorded video tapes are sold or rented should have a big banner over the door saying "Copyright Proprietors Make Money Here Because VCR's Exist." Even in the absence of such banners, that is the fact. The retail video dealer was not Hollywood's creation. Indeed, one of the early objections to the VCR was that studios had always marketed their products by license, but they could not license every VCR.* They failed to see that the marketplace would provide willing intermediaries who would enhance, rather than degrade, the value of motion pictures.

$5 Billion in Revenues

Videocassettes now, or soon will, provide more revenue to movie companies than do theatrical exhibitions in movie theaters. Let me repeat that: Hollywood is making more money from VCR's than it does from movie theaters. The watershed was reached in 1985. In January, 1986, Variety reported as follows:

> Consumer spending on the rental and purchase of videocassettes in 1985 skyrocketed to about $4.55-billion, a figure that soared above the '85 theatrical box office total and nearly doubled the size of the video business in '84, according to the Fairfield Group, a Darien, Conn.-based research company.

* See Testimony of Jack Valenti, Op. Cit., p. 5.

> Projected '85 domestic box office is $3.75-billion, according to Variety, and the total '84 domestic video business, on the retail level, was about $2.63-billion, the Fairfield Group figures.
>
> Of that estimated $4.55-billion video market in '85, the take for Hollywood and other videocassette program suppliers is roughly $1.8-billion, based on estimated sales of 50,000,000 units, according to Steve Wilson, managing partner of the Fairfield Group. That's a video-revenue mark that will be tough for theatrical rentals to equal.
>
> Other industry estimates paint a similar picture -- that homevideo's total business and its revenues to program suppliers are approaching or eclipsing the levels generated by the theatrical market.*

I must confess, Mr. Chairman, that I underestimated in saying the VCR is one of the best friends Hollywood ever had. It is the best friend. And as they say in show business, "You ain't seen nothin' yet!" Billboard Magazine reported in February on a study predicting that by 1995:

> * Unit volume of prerecorded videocassettes will jump from 50 million pieces in 1985 to 700 million
>
> * Retail spending on prerecorded videocassettes will rise to $20 billion, with the wholesale gross rising to $13 billion**

The VCR has provided this huge, unprecedented market without appreciably diminishing the return from other markets. From 1981 through 1985 -- a period of explosive growth in home video -- annual Hollywood revenues from theatrical exhibition

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* "Consumer Vid Spending in '85 Exceeds U.S. Theatrical B.O.; H'Wood Studios Reap $1.8-Bil," Variety, Jan. 15, 1986, p. 41.

** "Study Projects a $20 Billion 1995 Market," Billboard, February 8, 1986, p. 44.

increased by 38%.* Many theater exhibitors believe that the effect of VCR's on theater attendance is either positive or minimal.**

I make these points not to claim any special recognition as a prophet, but to put things in proper perspective. To the extent you hear, today, complaints about some ways in which VCR's are used, and claims of lost revenue, think of where this revenue has come from. The VCR has created an astounding and unprecedented income stream for copyright proprietors. If producers believe that some additional, potential income is being displaced as a result of particular consumer practices, this does not justify blaming and attacking the VCR, any more than one would charge Santa Claus with failing to provide a warranty.

Claims of Harm From Recording Practices Must Be Examined Skeptically

The courts and the Congress have heard before that VCR's supposedly are used in ways that deny income to copyright proprietors. First, it was said that when people watched television through VCR's, they would never watch commercials, and huge projections of lost revenue were made on this assumption. Eventually they realized, however, that VCR's simply make TV viewing more convenient and efficient, and this

* "Studios' Revenue Seen Rising, Boom in Home-Video Business Credited," Washington Post, Jan. 2, 1986, p. D1.

**"Study Suggests Homevideo a Phase," Variety, Jan. 15, 1986, p. 7.

applies to commercials as well. Compared to peoples' usual habits in watching TV -- often leaving the room or switching channels during a commercial -- watching with the assistance of a VCR turns out to be a plus.*

Next, it was said that VCR's would diminish the value of pay cable TV. We pointed out, however, that VCR's make cable TV more valuable, because programmers need not repeat selections so often. Sure enough, cable companies around the country have begun advising their customers about how to use their VCR's to receive programming at the most convenient times.

Now, it is being said that video rental customers are making copies of tapes they have rented, and projections of harm are being compiled. Again, it is time to begin asking skeptical questions:

-- To copy a tape, you need two VCR's hooked up together. So you not only need two VCR's, you need them together, and you must either have a switching system or be willing and able to keep hooking them up and unhooking them. What percentage of all rental customers fall into all of these categories?

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* Indeed, on September 10 of this year the National Academy of Television Arts and Sciences gave "Emmy" Awards to three manufacturers for developing "a consumer video cassette recorder with time-shifting capabilities."

-- To rent a tape is between $1 and $2 in most places, whereas a blank tape costs more than $5. Most movies, the customer only wishes to view once. Therefore, even among those with the wherewithal to make copies, there is usually little incentive.

-- Even if copies are made and kept for a period of time, what evidence is there that such copies will displace a sale or another rental? The fact that some people might be willing to spend $7 to retain a program for a time ($2 rental plus $5 blank tape) does not mean he or she would have spent $30 to buy it. And if someone is intent on giving a meaningful gift, he or she will probably buy the movie, rather than make their gift a home-made, second-generation tape. What percentage of purchased tapes are intended as gifts?

Given all of these variables, it seems likely that the rentals and sales actually displaced as a result of copying from prerecorded tapes has been vastly overstated, and in fact pales in comparison with the $5 billion market that VCR's have created. In light of the very unfortunate implications, unfairness in principle, and very substantial risks, dislocations, inconvenience and expenses involved in any anti-copying chip system, the Congress should look long, hard

and very skeptically before it even thinks about tampering with VCR's.

Anti-taping Devices Would "Chip Away" At the Betamax Case

We have struggled hard to win the right to own VCR's, and to keep them free of pernicious "royalty" taxes. It should be understandable if we are wary of proposals that could take back all that we have won. The Supreme Court said that it is legal and proper to sell VCR's and the Congress has refused to encumber them with royalty taxes. What would be the implications, now, of a bill saying that VCR's must be equipped with anti-taping circuitry? To us, this sounds like a hi-tech fulfillment of Mr. Valenti's wish to "license" every person's VCR. Such a license implies that a right has been violated.

From a legal point of view, legislation requiring anti-taping chips might be seen as chilling, or even reversing, the result of the Betamax case. Why require a remedy if no right has been infringed? Anti-taping chip legislation could be read as implying that it does violate copyright to sell and use VCR's.

To consumers, the message of the anti-taping chip would be clear. The anti-taping chip is a time bomb packaged inside each VCR, and it makes the purchaser a hostage. Once such chips are contained in a majority, or substantial number, of VCR's, all the programmer need do is throw an encoding switch, and the right to tape is lost.

Such implications would not be lost on broadcasters and cable operators. So far, even with software - only anti-taping systems, such as Macrovision, available, broadcast and cable operators have resisted pressure from program suppliers to encode their signals, and rightly so. This resistance has confirmed, in the marketplace, the judgment of the courts and the Congress that VCR's are valuable, rather than detrimental, to broadcast and cable programming. Putting the force of law behind a requirement of anti-taping chips in VCR's, however, could amount to too much pressure. Program by program, consumers could find that broadcasts or cable presentations have been encoded, and they have lost the ability to copy them on their VCR's.* Despite the billions that have flowed to Hollywood as a result of VCR's, consumers will have won the battle but lost the war. We fear that this is the real intention behind the proposals for which ground is being prepared today.

Program Suppliers Are By No Means Helpless

Only in the cases of the clearest need, when the marketplace has been totally unable to allow the copyright proprietor to protect his rights, has the government stepped in with a mandated system. And the results usually have been abysmal.

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* Even if the right to tape from broadcast and cable were preserved in any legislation requiring anti-taping chips, once the chips are in the VCR's, the legal restrictions on their use could be relaxed in a later Congress.

With respect to copies from prerecorded tapes, program producers have been applying a process called Macrovision, that resides only in the software, and does not require the implantation of any anti-taping chip in VCR's. (Thus, it also works with the 36 million VCR's that already are owned by consumers.) While it has not been in general use on prerecorded tapes until recently (and broadcast and cable operators have refused to apply it), that situation is changing rapidly. According to Billboard of Aug. 23, 1986, Macrovision is now being applied to new releases from CBS/Fox, MGM/UA, Disney, MCA and HBO/Cannon; negotiations are in progress with other major program suppliers. If tape to tape copying can be avoided by applying coding only to the software, why is it necessary for the government to step in, and mandate a competing commercial system that involves putting a chip in VCR's?

There are complaints about some technical problems with Macrovision, but a software-only process can be, and has been, continuously improved -- unless the government removes the incentive to do so. In the Aug. 23 Billboard, Macrovision executives claimed that their process could be continually improved, and (unlike hardware-based systems) can be altered to avoid devices designed to defeat it.

One reason for anti-taping chip proposals might be to avoid, or gain leverage over, the substantial royalties that Macrovision has demanded. According to the Aug. 23 Billboard, Macrovision charges $.10 to $.25 per cassette for rights to apply its patented process. For the 50 million prerecorded cassettes sold in 1985, this would come to between $5 million and $20 million. For the 700 million cassettes projected for 1995, Macrovision's annual charge to the industry would be between $70 million and $280 million. At least one developer of a hardware based system, eager to establish a principle, has offered to license it for free. So the movie industry stands to save considerable royalty money by requiring anti-taping chips.

On the other hand, it would probably be necessary to keep applying and perfecting Macrovision, if the industry really is concerned with tape-to-tape copying -- because, at last count, there are 36 million VCR's without anti-taping chips. This being the case, we fail to see any rationale for requiring anti-taping chips, as well.

We do understand that Macrovision has also developed a system that works with anti-taping chips. Faced with proposals by your only customers, and the U.S. government, to destroy or diminish the value of your only asset, wouldn't you?

So long as Hollywood sees a chance to get control over VCR's by the "back door," and effectively cut back on the Betamax holding, we are frankly skeptical that adequate consideration will be given to perfecting means presently available for directly asserting one's own interest in the marketplace. This applies not only to Macrovision, but to other technical or non-technical measures, such as trying different pricing and marketing strategies, to avoid losing sales or rentals. Indeed, in the midst of a campaign to put anti-taping chips in VCR's, we doubt whether any such program can be fairly evaluated or assessed.

Putting Anti-taping Chips in VCR's Would be Intrusive, Expensive, Inconvenient and Confusing for Consumers

We don't see why VCR manufacturers and all of their customers should be forced to bear the expense, confusion, and inconvenience that would inevitably go with anti-taping chips. I can assure you that, just as the alleged losses from taping have been overstated, the costs, inconvenience and loss of rights arising from requiring anti-taping chips in VCR's have been understated.

Putting anti-taping chips in new VCR's means changing the product fundamentally after manufacturers and dealers have already sold 36 million units in the present form. It means having to level with your customers -- telling them that new machines are potentially less capable, but not being able to

say exactly how. It means, inevitably, bearing the responsibility, and the customer's ire, for any malfunction in or misunderstanding of the anti-taping device, and bearing the warranty responsibility for disputes over unsuccessful, destructive attempts to circumvent the chip.

An anti-taping chip requirement would, therefore, increase VCR costs at every level -- production, distribution, retailing, and service -- and therefore would significantly increase the costs to all consumers. Aside from the manufacturing costs of adding and testing a new system, and somehow explaining it in manuals, extensive training of all distribution personnel would be necessary. Retailers and service managers would all have to be trained, and they in turn would have to train all of their sales and service people. And still, the increase in customer confusion and product returns, and the decline in consumer demand for VCR's would be inevitable. And when manufacturers wish to change product specifications or improve formats, they could find themselves hamstrung by the requirement to conform to mandated anti-taping chip technology. This is how an increase in manufacturing costs or a mandated change in product format often results in a very significant increase in price at the retail level.

Is This Trip Really Necessary?

When we testified against a video royalty tax in April of 1982, we said:

> We should learn from the past, not be forced to repeat its mistakes. The congress, the courts, and the Federal Communications Commission have spent the last decade removing ill-advised restrictions from other forms of communications that expand the public's access to creative products, such as pay cable and subscription TV. In this era of deregulation, it seems out step to seek once again to interpose a governmental agency into a freely functioning marketplace, which is working, and will work, to compensate fairly all deserving parties.*

Program producers' earnings in the marketplace, from VCR's, have been more than fair -- they have been spectacular. Let's not strangle the golden goose.

Thank you, Mr. Chairman, for having invited me to testify today.

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* Statement of Charles D. Ferris, op cit., p. 185.

[From the Washington Post, Jan. 3, 1986]

STUDIOS' REVENUE SEEN RISING—BOOM IN HOME-VIDEO BUSINESS CREDITED

(By Kathryn Harris)

Despite a highly publicized drop in movie-going in 1985, media analyst Paul Kagan predicts that studios will enjoy a 25 percent jump in 1986 revenue to $6.7 billion, spurred largely by the booming home-video business.

Kagan, a Carmel, Calif.-based consultant and a well-known newsletter publisher in the cable-television, broadcasting and home-video fields, said the studios have averaged a 15 percent gain in revenue over the past five years if all forms of film distribution are tallied.

He said the largest revenue gains in the past five years have been in foreign home video (up 753 percent to $640 million); domestic home video (up 689 percent to $1.5 billion) and pay television (up 180 percent to $700 million).

Only the business of selling motion pictures to network television has declined since 1980, down 43 percent to $200 million in 1985, the analyst said.

Revenue from the most traditional form of distribution—motion picture theaters—increased 38 percent during the five-year period in the United States and Canada to $1.52 billion in 1985, even though domestic box-office ticket sales declined an estimated 5 percent in 1985, Kagan said.

He estimated that 1985 domestic theatrical revenue $1.52 billion still topped video revenue of $1.5 billion in the United States and Canada, but he predicted that domestic video revenue will surge ahead to $2.3 billion this year versus $1.68 billion in 1986 theatrical rentals.

As had been widely predicted in the industry, home-video revenue of $2.1 billion surpassed theatrical rentals in 1985 for the first time on a worldwide basis, Kagan said.

Kagan cautioned that overall growth rates will slow after 1986, because of "a saturation of population by the VCR machines and stabilization of consumers' tape usage." He asserted that the studios "are going to have to learn to get people to consume more tapes."

Kagan said this is the first time he has attempted to tally the total revenue picture for film distributors from all exhibition sources.

"It does not behoove the studios, to tell . . . people they do business with . . . how big their business is," Kagan said in a telephone interview. He stopped short, however, of estimating which form of distribution has proved most profitable for the studios.

The CHAIRMAN. We stand adjourned.

[Whereupon, at 12:05 p.m., the committee was adjourned, subject to the call of the Chair.]

APPENDIX

Consumers Union

October 3, 1986

Honorable Strom Thurmond
Chairman, Committee on
the Judiciary
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Consumers Union appreciates your invitation to submit a statement for the record of hearings held September 23, 1986, on home video taping. Consumers Union is opposed to any requirement that home video recorders contain decoding chips to defeat copying of encoded, pre-recorded video programs.

I hasten to state at the outset that Consumers Union in no way condones unlawful copying of pre-recorded, copyrighted materials. Copyright holders have every right to use available technology to protect such materials from unauthorized copying of video cassettes, and many of them do.

Further, were a solid case to be made that unauthorized copying is sufficiently widespread to lessen the incentives for creativity, we would support a legislative remedy that is consistent with consumers' rights to engage in legitimate copying in accordance with the Supreme Court ruling in Sony Corp. of America v. Universal Studios.

However, the assertion that unlawful copying is widespread and threatens creativity leaves many key questions unanswered, especially with regard to actual displacement of sales and rentals. We do not accept at face value the predictions of doom offered by an entertainment industry which enjoys a very profitable new market created by the home video cassette recorder -- largely against the industry's own inclinations. Further, a requirement or tax-created incentive to incorporate a copy-defeating chip in all new home VCRs could defeat consumers' rights to time shift telecast and telecable programming. As the Committee has been told, all that would be needed is for the TV programmer to "throw a switch".

The assertion that current voluntary technological solutions are inadequate seems to require far more extensive supporting evidence than has been offered to date. For instance, no specific evidence has been offered on the frequency of ownership of "black box" devices that defeat current copy-defeating technology, although much is made of their availability (attachments to Valenti testimony).

The existence of copyright protection is one thing. Governmental action to enforce private rights under the Copyright Act is quite another. If and when the case is made that unlawful video copying is so widespread as to threaten the creativity intended to be encouraged by the Act, we would support a remedy consistent with consumers' right to legitimate uses of home VRCs. Until that time we oppose legislation on this subject.

Sincerely,

Mark Silbergeld

Mark Silbergeld,
Director, Washington
Office

STATEMENT OF JONAS ROSENFIELD
PRESIDENT OF THE AMERICAN FILM MARKETING ASSOCIATION

Mr. Chairman, and members of the Subcommittee, I am Jonas Rosenfield, President of the American Film Marketing Association (AFMA). AFMA is a trade association whose 73 member companies comprise the independent, English language motion picture industry. In addition to representing the vast majority of American films sold abroad, AFMA members distribute 86% of all non-pornographic, independent films released in the United States and most are engaged in film production or financing. As such, they have an enormous stake in any effort designed to reduce the disregard for their copyrighted motion pictures.

I appreciate the opportunity to address your Committee concerning the need for legislation requiring future VCRs marketed in the U.S. to contain special circuitry which would prevent the unauthorized duplication of copyrighted videocassettes and video discs. This is an important issue with profound impact on the motion picture industry. Unauthorized "back-to-back" copying of copyrighted movies is theft which threatens the viability of our industry and is harmful to American copyright owners, video store operators and ultimately consumers.

Unauthorized back-to-back copying of copyrighted material is illegal. It violates the copyright protections

guaranteed by the Constitution and by this Congress in the 1976 Copyright Act. It is unfair in that it permits the expropriation of the legitimate property rights of copyright holders without any compensation. Back-to-back copying violates the copyright owner's exclusive "right to reproduce" his or her work under Section 106(1) of the Act. Section 106(1) does not distinguish between commercial and noncommercial copying.

Unfortunately, there is widespread misunderstanding fueled by grossly inaccurate press reports of the meaning of the Supreme Court's Betamax case (Sony Corporation of America v. Universal City Studios). That decision does not purport to insulate unauthorized in-home copying from liability under the Section 107 fair use exemption. Rather, the Court's ruling was extremely narrow. The Court's decision merely interpreted Section 107 to permit "time shifting", which is defined as the recording of a program from free over-the-air TV to be viewed once at some later time and then erased, within a presumably brief period.

The Court's decision permitting time shifting cannot be read as authorizing consumers to make a permanent copy of a prerecorded videocassette. Unlike free over-the-air television, a prerecorded videocassette is a commercially marketed product. Its commercial value derives exclusively from its sale or rental in the marketplace. The unauthorized duplication of such a product destroys its

value. Every unauthorized copy made from a recorded videocassette displaces the sale or rental of that cassette.

The unauthorized back-to-back copying of videocassettes is not a casual violation of passing interest to the motion picture industry. Home video rentals and sales already are vital components in the financing of the motion picture industry and in the future will probably be its primary financial vehicle. Movie theater box office receipts today account for only 38% of all domestic film revenues, and are estimated will account for less than 16% of all domestic film revenues by 1995. In contrast, home video, which today has a 35% share of all domestic film revenues, is estimated to grow to a 75% share by 1995.

It doesn't take an economist to recognize that unauthorized back-to-back copying of these videotapes poses a serious threat to America's motion picture industry. As home video becomes an increasingly prominent means of recouping production costs, back-to-back copying displaces sales of legitimate videocassettes and erodes that very revenue base. The bottom line is: back-to-back copying reduces the ability of producers to recoup their costs, denies them their rightful compensation in the marketplace, diminishes their ability to produce new original works to meet consumer demand and threatens the variety, diversity and growth of the entire film and home video industry.

AFMA is especially concerned about the losses this piracy causes to its members because of the particular

vulnerability of these independent production and distribution companies. Most AFMA members are relatively small companies with only one or two films in distribution at a given time. Therefore, each film represents a significant investment by the company and any lost revenue can place a tremendous drain on its resources. These companies, making smaller films, on tighter budgets, depend on financing through the sale of video rights for their very existence. Therefore, home taping piracy which results in even relatively minor incremental revenue loss can have a devastating effect on their viability.

How widespread is the problem? It is estimated that over 72 million unauthorized copies have already been made from rented, borrowed or previously purchased videocassettes or discs. Compare this figure to the total number of legitimate prerecorded videocassettes sold to dealers between 1980 and 1985: approximately 95 million copies. It is estimated that $300 million annually is lost to this piracy. And the figures are growing at an alarming rate. By the estimates of a leading tape manufacturer the number of blank cassettes sold this year will amount to three times the number of blank tape sales of just two years ago.

The problem is reminiscent of the Clean-Up America television campaign of a few years ago. The announcer would say, "What's one grain of sand . . . nothing. But put enough of it together and you have a beach. What's one piece of garbage . . . nothing. But put enough of it

together and you have a dump." Likewise, making an unauthorized duplicate of a rented videocassette seems innocuous enough, but in the aggregate unauthorized noncommercial back-to-back copying can be just as damaging to copyright owners as large-scale commercial piracy.

When a consumer makes a back-to-back copy of a prerecorded videocassette, that activity displaces one of three legitimate commercial transactions: (1) the purchase of a videocassette of the same work from a video store, (2) one or more future rentals of that videocassette, or (3) one or more future sales or rentals of a different work which he would view if he didn't have the unauthorized copy available in its stead.

The consequence of such displaced sales and rentals is insidious: Consumers rent and purchase fewer videocassettes from video retail stores which, in turn, make less money and fewer purchases from the motion picture companies, which leads to reduced revenues for producers and therefore, diminished capital for future productions. The end result costs jobs and opportunities for the artists, technicians, writers, actors, directors and investors in motion pictures and ultimately harms consumers who are denied their creative efforts.

As discussed earlier, part of the problem stems from a lack of public awareness that unauthorized back-to-back copying of prerecorded videotapes is illegal. Obviously, Congress can help allay that misconception. But

more is required. Copyright owners have done all they can to discourage unauthorized back-to-back copying including warnings, and certain "unilateral" protective technologies -- where the prerecorded videocassette carries electronic signals intended to interfere with unauthorized copying. However, people ignore the warnings and employ VCR technologies to render the "unilateral" technologies ineffective.

Fortunately, there is a simple solution. An inexpensive, 100% effective "bilateral" technology already exists which requires only a very minor modification in the VCR's circuitry along with special encoding of the prerecorded videocassette or disc. Moreover, this bilateral technology has no adverse effect on the quality of the audio or video signal. However, legislation is required to implement this technology because so long as some manufacturers do not utilize this anti-copying technology in their VCRs, other manufacturers also will not because doing so would render their machines less attractive to consumers.

Only through comprehensive legislation can all manufacturers be treated equally and no manufacturer gain undue advantage against any other by failure to comply. Anti-copying legislation should protect the integrity of the copyrighted works by rendering future VCRs incapable of making unauthorized copies of prerecorded videocassettes while permitting consumers to continue to record and duplicate home movies and to play back legitimate videocassettes.

I have attempted to describe to you the frustration experienced by the motion picture industry at witnessing the theft of its copyrighted films and to explain why the avidness with which pirates avail themselves of the back-to-back copying technology makes it mandatory that this matter be dealt with under our laws. It is not only inequitable to permit this material to be stolen but it also undercuts the economy of an industry which is of great importance to the United States in terms of its culture and heritage as well as the financial interests of many of its creative talents.

Internationally, American films serve as our unofficial cultural ambassadors. As distributors of the majority of American films sold abroad AFMA's members play an important role in this process and the revenues their films generate aid in reducing the U.S. trade deficit. Naturally, we would also like to see an end to foreign piracy of our members' copyrighted films. Although legislation mandating implementation of bilateral technology for VCRs sold in the United States would not preclude unauthorized back-to-back copying in foreign countries, it is a beginning. Hopefully, legislation mandating respect for U.S. copyrighted property will serve as a precedent for reciprocity and similar legislation throughout the world wherever American films are seen.

I am reminded of the enduring wisdom of the Founding Fathers and the drafters of our Constitution who

entrusted to all future Congresses the responsibility to "promote the progress of science and the useful arts, by securing for limited times to authors and inventors the exclusive rights to their respective writings and discoveries." It is clear that because of technological advances the existing copyright law no longer strikes the balance which the writers of the Constitution had in mind: the balance between the copyright owner's right to compensation and the interests of VCR owners. We, therefore, urge Congress to restore this balance and require adoption of anti-theft VCR circuitry.

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